SNK

ROADS EDGE

TM
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USER'S MANUAL
ROADS EDGE

Warning

■ Be sure to read this user's manual before use.

■ Keep this manual nearby when operating this cabinet.

TO OUR VALUED CUSTOMERS

Thank you for your purchase of the Roads Edge cabinet.
This user's manual is targeted at users, technicians, and operators of this product. Various methods for placing, operating, maintaining, testing, and moving this product are explained herein. These procedures listed should only be performed by those who have carefully read and understood this manual.
Finally, keep this manual where it can easily be found for reference during routine operation, etc.

Those who replace parts, carry out maintenance and testing, and handle malfunctions should be limited to maintenance staff and technicians.

[In-store Maintenance]

In-store maintenance staff refers to those who have experience in handling amusement machines, and under the supervision of the amusement machines' owner or operator are engaged in the daily upkeep of machines, including installation, maintenance checks, and replacement of units and disposable parts.

[Technicians]

Technicians refer to those who are involved in the designing, manufacture, checking, and maintenance at an amusement machine manufacturer and also have advanced training or equivalent experience in the daily upkeep and repair of amusement machines.

Precautions for safe operation

The procedures listed herein must be carefully followed to ensure both safe operation and to prevent personal injury and property damage. Before use, please carefully read through the manual for proper usage methods. After reading it, be sure to keep the manual in a safe place for later reference.

■ Display Explanations

Danger	Warning
Ignoring these warnings may result in death or serious injury.	Ignoring these warnings may result in injury or property damage.

Danger

- **This cabinet is for indoor use only. This machine should never be placed outdoors or used in the places listed below. Doing so may damage the machine and cause accidents.**
  - In areas such as indoor pools or near a shower where humidity is high.
  - In areas exposed to direct sunlight.
  - Near areas exposed to direct heat from a heater, etc., and around dangerous materials
  - In excessively dusty areas
  - In areas that are prone to water leakage and flooding.
  - Near ventilators and areas of severe temperature extremes.
  - In areas subject to severe jolts and unstable locations.
  - Near fire lighting equipment.
- **Should any of the following occur, immediately turn the power switch off and unplug the cabinet. Continued use in any of these circumstances may result in accidents such as fire and electric shock.**
  - When the cabinet breaks down
  - When the cabinet is damaged.
  - When water or foreign matter enters the cabinet.
  - When smoke, unusual odors, or strange noises emanate from the cabinet.
- **Be sure to tightly connect all connectors. If insertions are partially or incorrectly made, these may result in accidents such as fire and electric shock.**
- **Before changing software and performing other procedures, be sure the power switch is turned off and the cabinet unplugged. Performing procedures while the power is on may result in accidents such as fire and electric shock.**
- **Do not perform repairs or modifications on the cabinet yourself. Doing so may result in accidents such as fire and electric shock.**
- **Be sure to use an outlet rated at AC220–240V and insert the plug into a specialized outlet. If other high-capacity products (air conditioners and large-size cabinets, etc.) are used on the same power line, this may result in accidents such as fire and electric shock.**
- **Be sure to ground the cabinet. If not suitably grounded, the cabinet may cause electric shocks in the event of a short circuit.**
- **Place the cabinet as close as possible to the outlet and ground connections. Keep electric cords out of sight from customers. If exposing cables cannot be avoided, be sure to place a protective cover over them for protection. Do not forcefully bend, pull, or place heavy objects on cords.**
  If cords are damaged, they may result in accidents such as fire and electric shock.

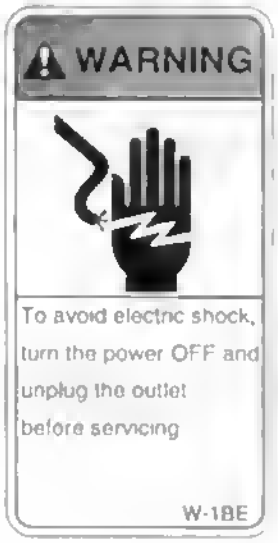
- While moving the cabinet with casters, move it slowly being caretul of the area around you. Make sure this is done with a suitable number of personnel and take proper measures to accommodate the cabinet's size and weight.
- Absoiutely do not touch the back of the monitor.
  Because the monitor has high voltage parts, touching these even after the machine is unplugged may cause severe electric shock.
- Do not place any of the following materials on or around the cabinet.
  If liquid should spill onto or into the cabinet, it may cause accidents involving electric shock and damage the machine.
  - Vases, potted plants, cups, cosmetic products, and containers holding medicine and water.
- Do not use multiple appliances on a single outlet. This may cause fire and electric shock.
- Before moving the cabinet, be sure to unplug the power cord. This is necessary to avoid accidents and damage to the cabinet.
- Do not damage the power cord and ground cable when moving the cabinet.
  This may cause accidents and damage to the cabinet.
- Be sure to use specified parts and fuses meeting the specifications listed herein. Using parts not meeting these standards may cause damage or breakdowns.
- Make sure the warning labels affixed to the cabinet can be read at all times. Be sure they are in an open place, well-lighted, and not dirty.
  Also, be careful these labels are not hidden by other objects such as game cabinets, etc.
- Do not unplug the machines if your hands are wet. This may cause an electric shock.

- Do not mount the cabinet or place heavy objects on it. This will not only cause injury should it become unbalanced and tip over or fall, it may also damage the cabinet.
- When unused for long periods, turn the cabinet off and unplug it for safety.
- Place the cabinet where room temperature is between 5°C and 35°C. If the temperature exceeds or falls below the recommended temperature range, this may damage the cabinet.
- During shipping or moving, avoid serious jolts to the cabinet. This may cause damage or breakdowns.
- Be sure to use fuses meeting the specifications listed herein. Using parts not meeting these standards may cause damage or breakdowns.
- Always use a Logic tester when checking IC port circuitry. Using a normal tester may cause damage or breakdowns.
- When installing the cabinet, be sure to calibrate the adjusters to bring the cabinet level. Should it fall over, it may cause injury and accidents.
  If the machine is not level, there are times when the coin sorting function may not work.
- Do not apply volatile liquid cleaners like benzene, alcohol, thinner, and insecticides to the cabinet. This may cause paint and stickers to peel and ruin the luster of the cabinet's finish.
- Raise the adjusters and move the cabinet. This is necessary to avoid accidents and injury.
- Over graded areas, be sure to remove the control section and seat section before moving the cabinet. This is necessary to avoid accidents and injury.
- When disposing of this machine, make sure you do so according to the laws of your area concerning collection, shipping and disposal.
- When disposing of this cabinet through the agency of another, be sure to do this through a suitably qualified agency.

DANGER and WARNING Label Stickers

1

W-1BE
(Warning seal No.1 small vertical type)



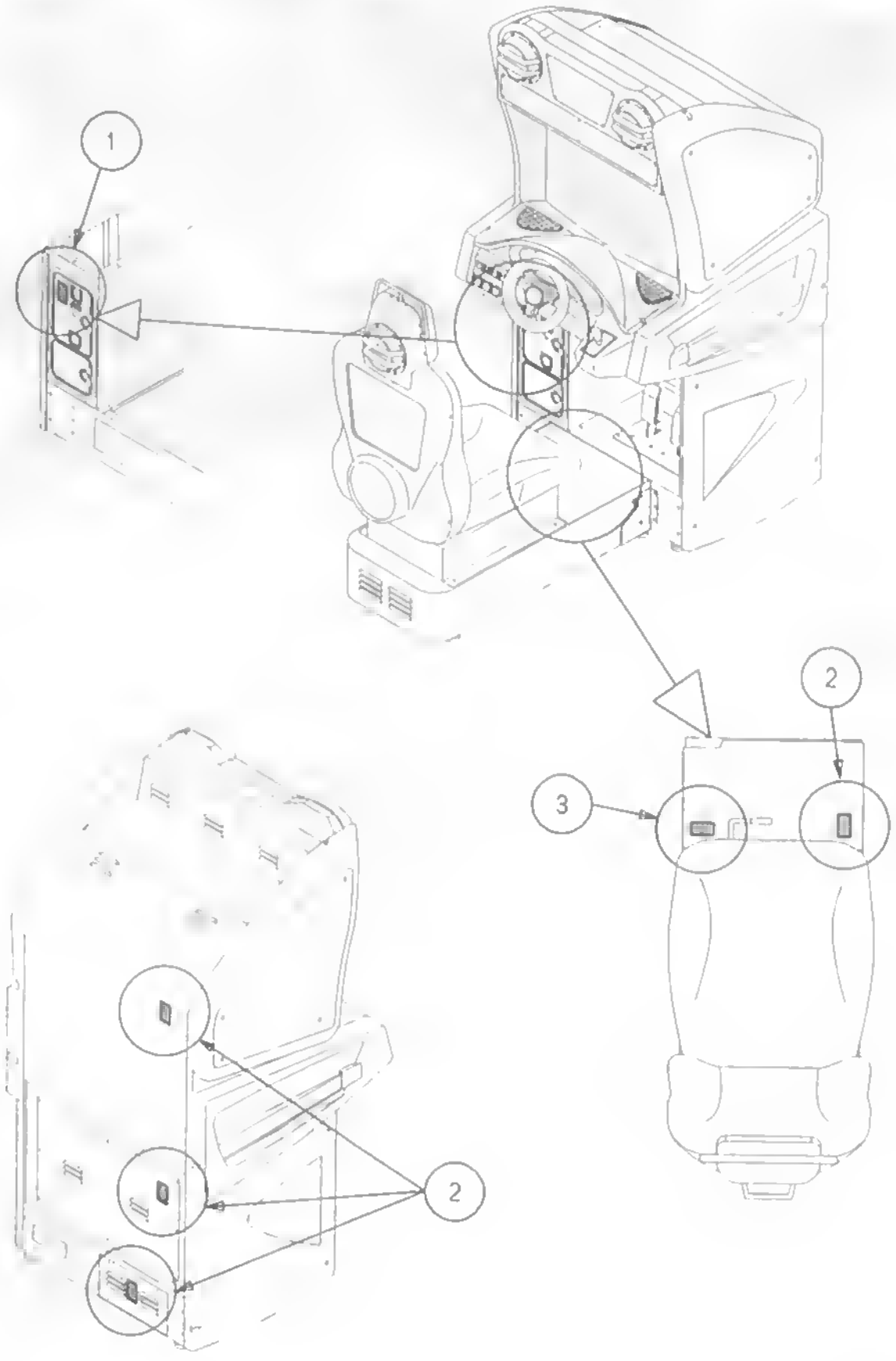
2

W-2BE
(Warning seal No.2 small vertical type)

3

C-4E
(Caution seal No.4)

Places for Affixing DANGER and WARNING Labels



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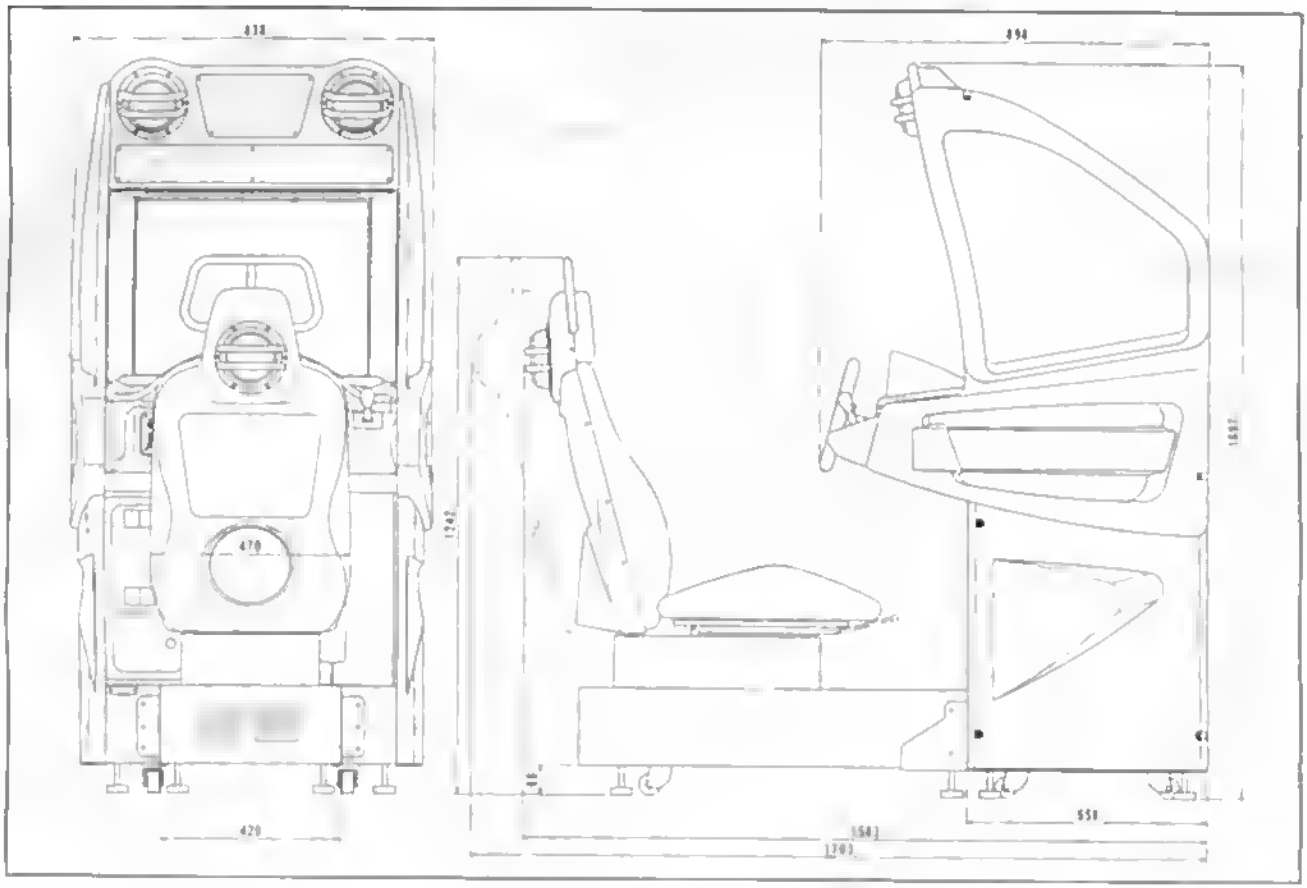
* Specifications may be changed without notice.

■ Specifications



Model number: RV29-S

1. Power supply: AC220–240V (50/60Hz)
2. Power consumption: 250W
3. Dimensions: 838 mm (W) × 1,583 mm to 1,703 (D) × 1,697 mm (H) [In completed state]
   838 mm (W) × 893 mm (D) × 1,637 mm (H) [Operating section]
   470 mm (W) × 1,025 to 1,145 mm (D) × 1,242 (H) [Seat section]
4. Total weight: 222 kg; Control panel: 178 kg; Seat section: 44 kg
5. Internal monitor: 29-inch CRT color monitor (with anti-static coating)
6. Fuse Standard: 6A (anti-surge type)

Accessory List

Part name	Part code	Qty.	Notes
User's manual		1	
Billboard	570860621	1	With RV POP sticker affixed
Common keys	4315533	3	For LK33A (G5533)
Cash box keys	43233	2	For LK33A
M4 cross, panhead 3-point screws	81310410	6	For attaching the billboard
Ground cable	375900620	1	
Communication cable	370000620	1	
Protector	4942677	1	
Monitor adjustment screwdriver		1	
Hexagonal wrench (1/16")	88116621	1	For changing the steering volume
Seat mounting fixture (Left)	513201620	1	
Seat mounting fixture (Right)	513301620	1	
M8 hexagonal bolts	83143815	8	For attaching control panel and seat sections

* Be aware that the items listed herein are subject to change without prior notice for product improvement.

■ Packing Check

This cabinet is packed in the method below:

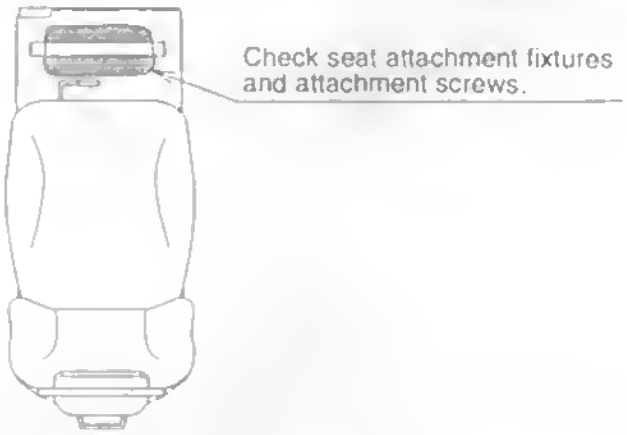
- Number of packages: 2
- Package contents: Road's Edge Operating section
  Road's Edge Seat Section

* Because packing will be needed subsequently for shipping between locations, store the cardboard boxes and pallets, etc., in good condition in an suitable location.

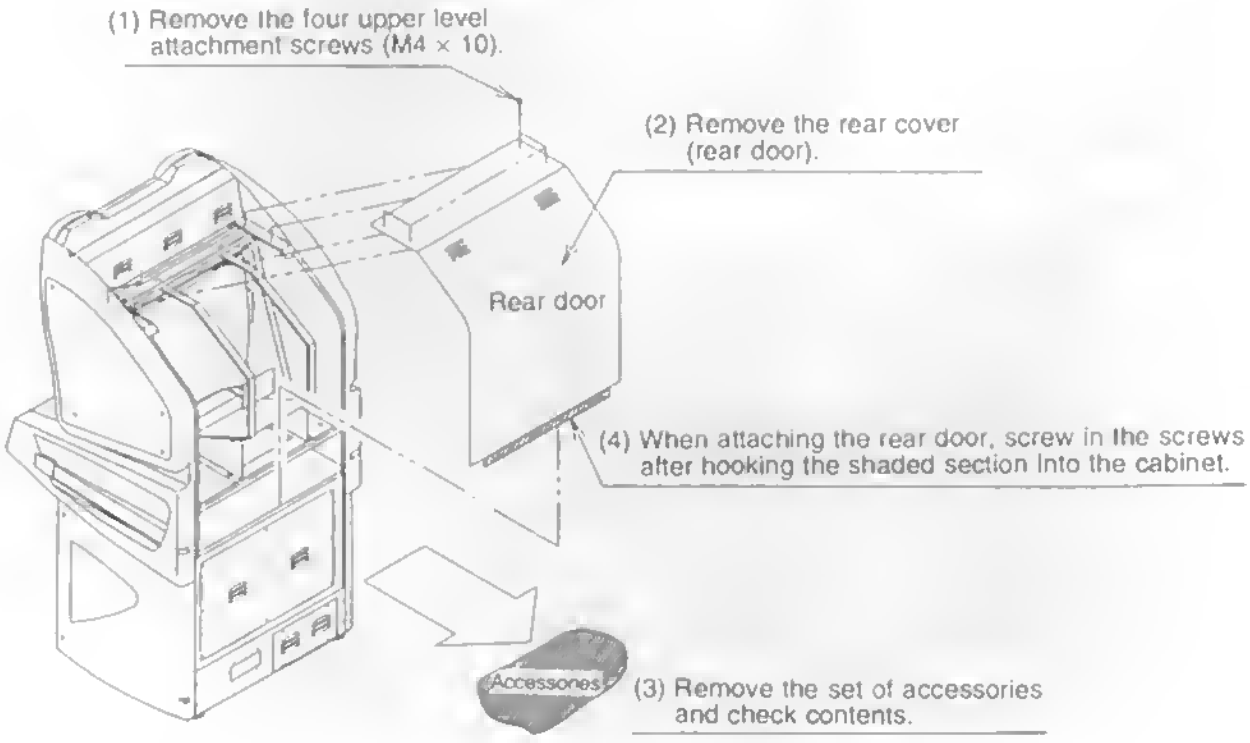
Accessories

Accessories are packed in the locations listed below. Remove these and confirm all parts have been included while consulting the chart on page 7.

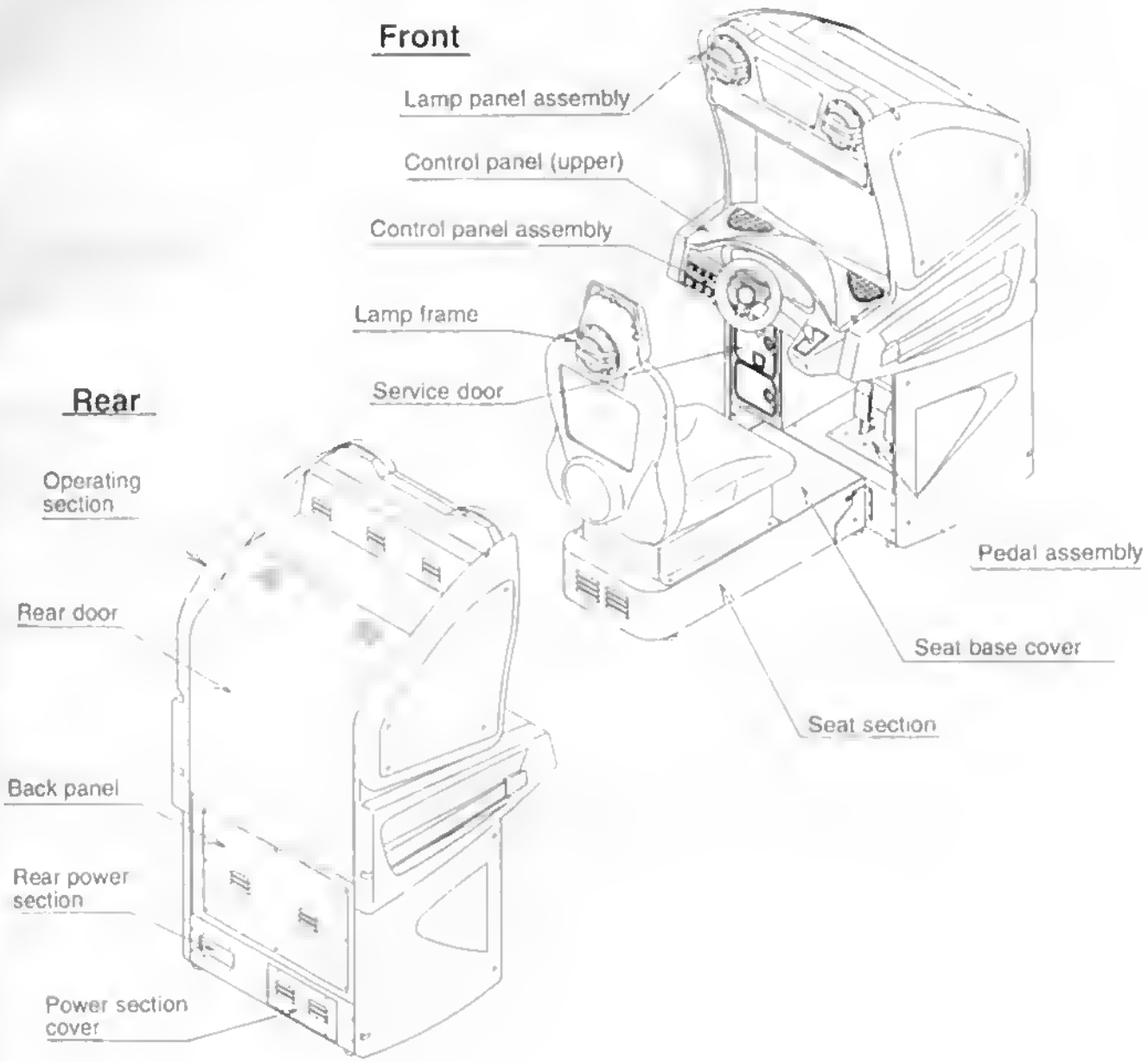
1. Seat attachment fixtures (Left and Right) and hexagonal bolts are affixed to the seat section in the location shown in the diagram.



2. Accessories other than those listed above are located in the operating section (below the monitor) in the locations shown in the diagram.
   Follow the procedures shown in the diagram to remove these.

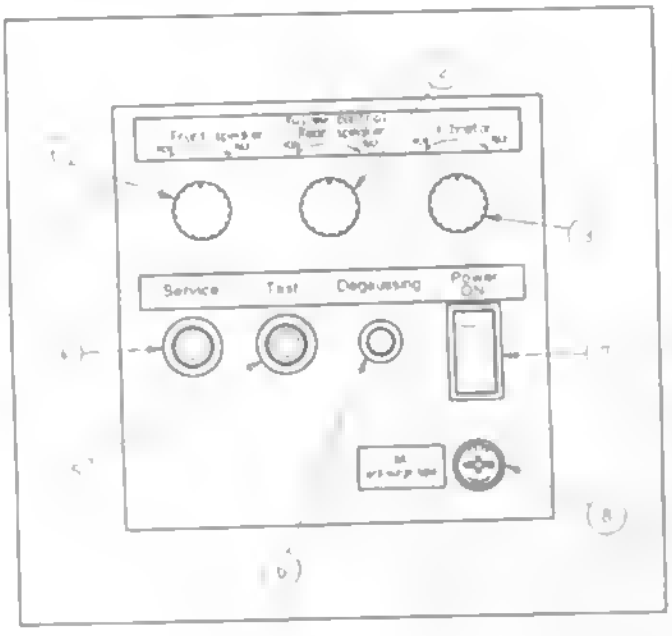


■ Part Names


Front
Lamp panel assembly
Control panel (upper)
Control panel assembly
Lamp frame
Service door
Rear
Operating section
Rear door
Back panel
Rear power section
Power section cover
Pedal assembly
Seat base cover
Seat section

■ Switch and Terminal Locations

Control Panel: Inside the service door, the following switches and terminals are accessible.



(1) Volume .. .. Adjusts the volume levels of the front speakers.

(2) Volume . ..... Adjusts the volume levels of the seat speakers.

(3) Volume ..... Adjusts the volume levels of the vibration generator under the seat.

(4) Service switch ..... The service credit switch.

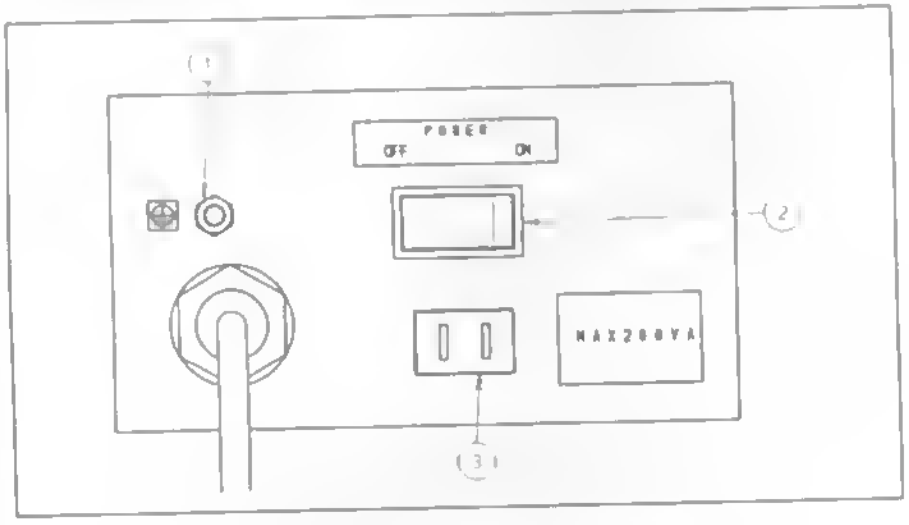
(5) Test switch ..... The switch that begins the Test Mode.

(6) Degaussing switch ..... Used when there is static buildup on the monitor.

(7) Front power switch

(8) Fuse holder . Holds the 6 A, anti-surge fuse.

Operating section: In the rear power section, the following switches and terminals are accessible.



(1) Ground terminal . . . . . .Connect the ground cable here.

(2) Rear power switch

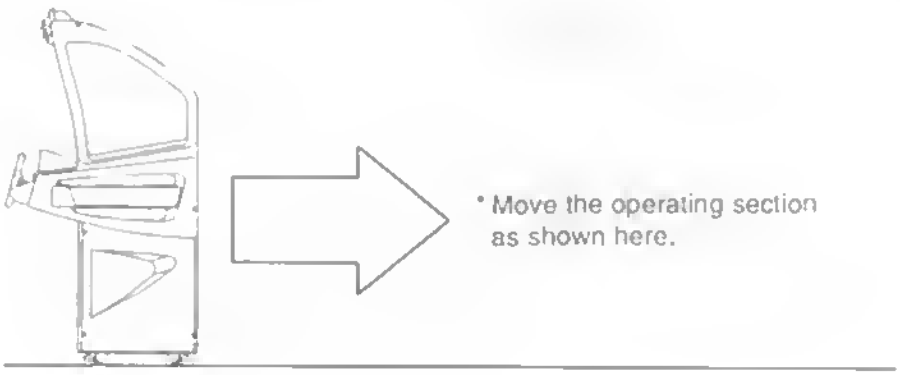
(3) Service outlet

* If the front power switch and the rear power switch are not both switched on, the cabinet will not operate.
* The service outlet at the rear of the operating section is to be used only for tools when repairing the cabinet. Do not use this outlet as a power source for other cabinets.

■ Moving and Shipping the Cabinet

When moving or shipping the cabinet, be aware of the points listed below.

- When moving and carrying the cabinet over graded surfaces, be sure this is done with the operating section and seat section separated. Separating parts is to be done in the reverse order of the procedures used to assemble the cabinet during installation.
- Use a forklift only when the cabinet has been fully packed.
- When moving the operating section separately, be sure to push it in the orientation and direction shown in the diagram below.



Danger

- When moving the cabinet, be sure to do so with the appropriate number of personnel. If the cabinet should fall or tip over, it may cause personal injury and other accidents.
- When moving the cabinet, be careful of conditions around you and create a path sufficient to safely move the cabinet.
- Before moving the cabinet, make sure the power cord is unplugged. This is necessary to avoid accidents and damage to the cabinet.
- Do not damage the power cord and ground cable when moving the cabinet. This may cause accidents and damage to the cabinet.
- Moving and shipping should be carried out with a number of personnel. This is necessary to avoid accidents and personal injury.
- When moving the operating section separately, be sure to move it in the orientation and direction specified. If the cabinet falls over, it may cause personal injury and other accidents.
- Do not damage the wiring. This may cause fire and electric shocks.
- When moving the cabinet in an unpacked state, do not use a fork lift. There is the danger of personal injury should the cabinet tip over or fall.

Warning

- Do not move the cabinet with the adjusters lowered. This may cause personal injury and accidents.
- When separating the cabinet's sections, keep careful track of removed parts and screws so you do not lose them.

■ Placing and Assembling the Cabinet

Necessary Entrance Dimensions

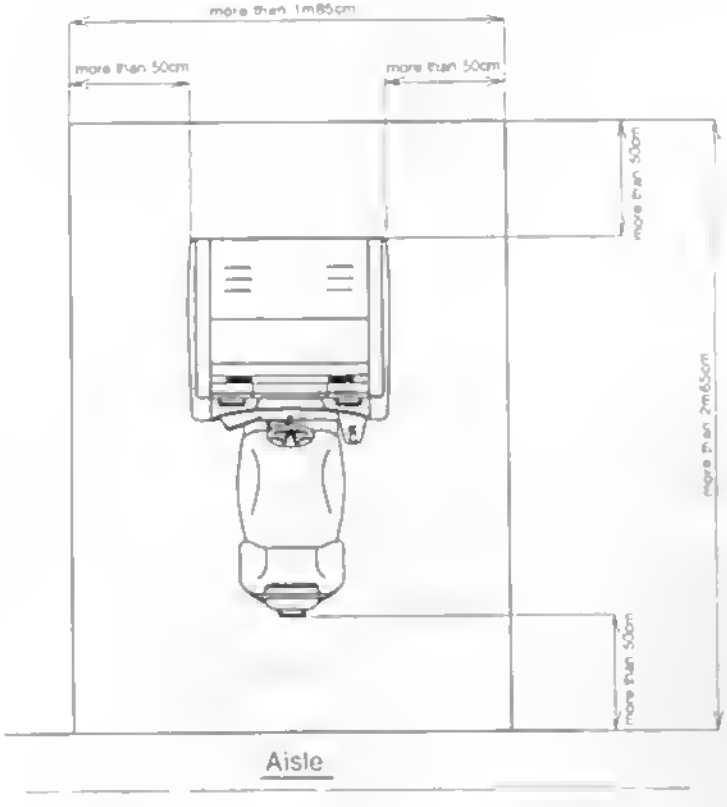
At the time of shipment from the factory, the cabinet is shipped with the control panel and seat sections separately packed. Each package's size and weight are shown below. Check the size of your entrances to see if these can be accommodated.

- Operating section: 885 mm (W) × 955 mm (D) × 1,850 mm (H) [includes height of pallet]; weight: 197 kg
- Seat section: 520 mm (W) × 1,095 mm (D) × 1,880 mm (H) [includes height of pallet]; weight: 57 kg

Placing Conditions

The areas needed for operating and maintaining the machine are shown below

- Single-cabinet use: 1,350 mm (W) × 2,650 mm (D)



This cabinet can be linked with up to four cabinets for communication competition.
When using communication links, place cabinets as listed below.

- As with single-cabinet usage, the back of cabinets should be placed apart by more than 50 cm.
- As with single-cabinet usage, the edges of both sides of the cabinet should be separated by more than 50 mm from walls and other cabinets.
- Cabinets in a communication network should be placed so the communication cables easily reach the other cabinets. (See pp. 46-47)

Preparations for Installation

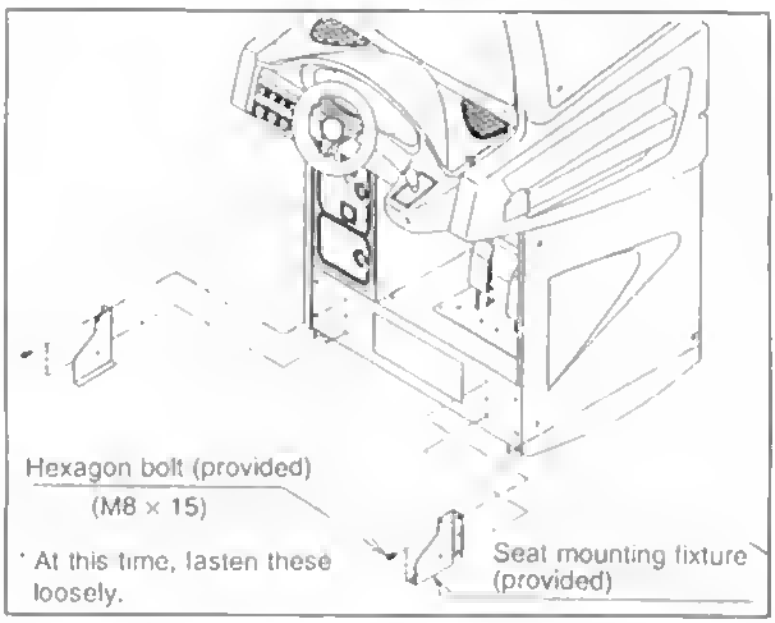
Before installing cabinets, prepare the following items.

- Accessories:.....Billboard, Left and Right seat mounting fixtures, common keys (2), M8 hexagonal screws (8), M4 screws (6)
- Tools: .....Philips (+) screwdriver, sub-tensile 13 mm box wrench, spanner, footstool

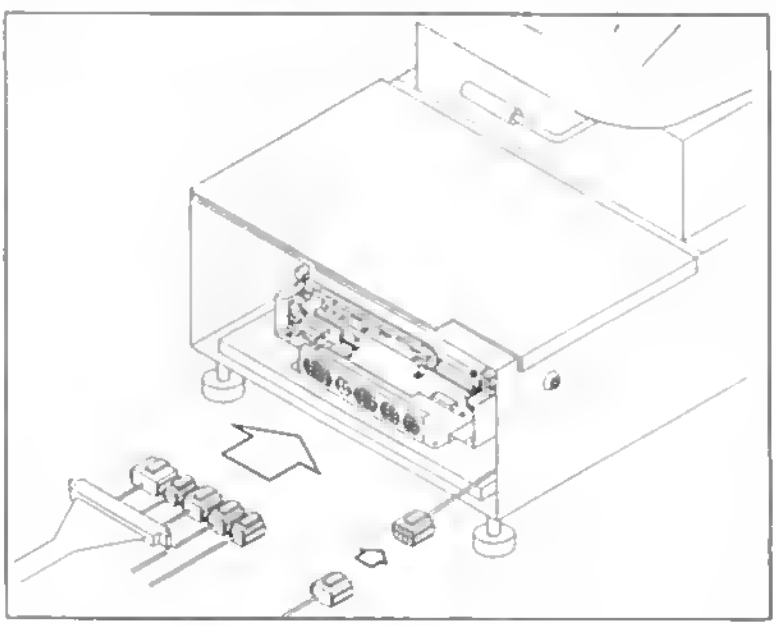
Installation Methods

Connecting the operating section and the seat section.

(1) Loosely fasten the seat mounting fixtures (Left and Right) to the locations shown in the diagram of the control panel section with the four hexagonal bolts (M8 × 15).

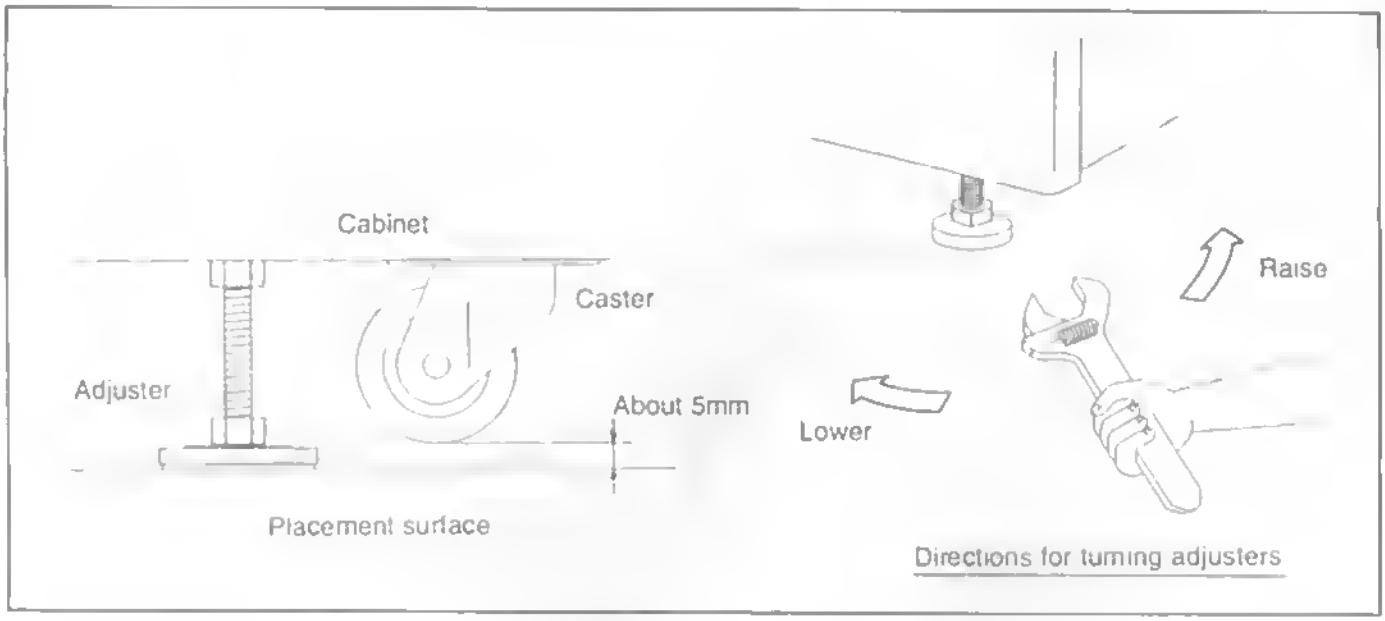


(2) Position the operating section near the seat section and connect the seven connectors.



(3) Lower the adjusters at the bottom of the operating section (four locations) to the surface. When they are set on the surface, use the spanner to adjust the height of each adjuster and bring the cabinet level (the casters should be about 5 mm off the ground).

(4) Adjust the four adjusters on the bottom of the seat section to the same height of the operating section.



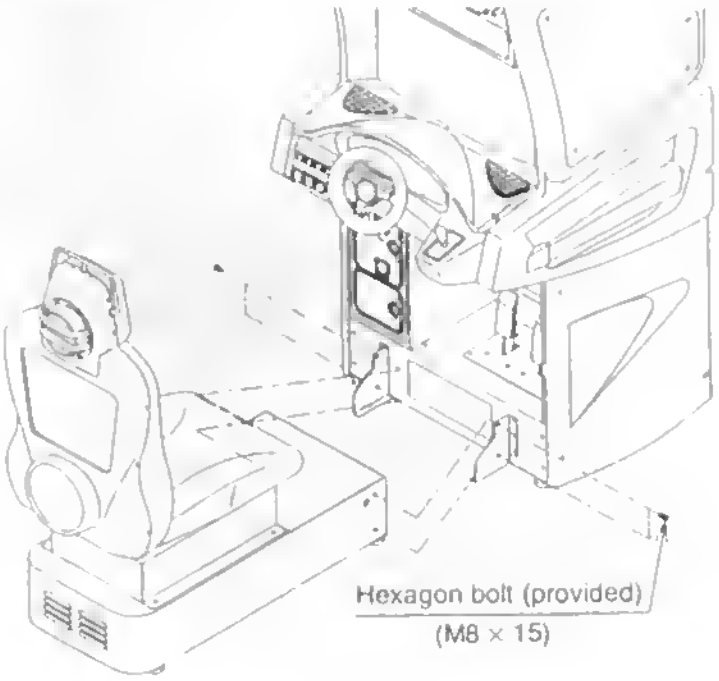
Directions for turning adjusters

(5) Being careful not to pinch the connectors and harnesses, attach the operating section to the seat section.

(6) As shown in the diagram, attach the four hexagonal bolts (M8 × 15) to the seat section.

(7) Tighten the hexagonal bolts loosely screwed into the cabinet in step (1).

* When separating the sections, follow the above procedures in reverse order.



Danger

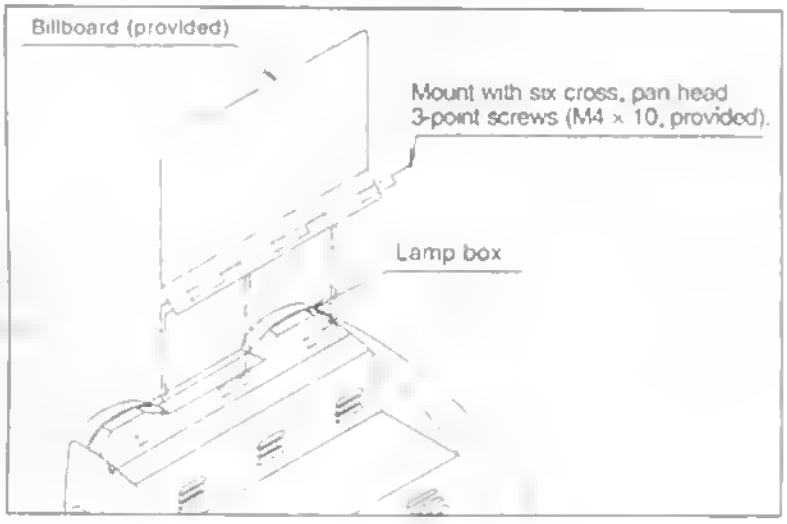
- **Under no circumstances should the cabinet be placed in the locations listed below. So doing may result in accidents such as fire and electric shock.**
  - Indoor pools, areas near a shower, and other locations where humidity is high.
  - In areas exposed to direct sunlight.
  - In areas that are excessively hot, like next to a heater. In areas around dangerous materials.
  - In places that are excessively dusty.
  - In areas prone to leaking or flooding.
  - Near ventilators and areas of severe temperature extremes.
  - On inclines, areas subject to severe jolts, and other unstable locations.
  - Near fire fighting equipment, etc.
- **Do not place any of the following materials on or around the cabinet. If liquid should spill onto or into the cabinet, it may cause accidents involving electric shock and damage the machine.**
  - Vases, potted plants, and containers holding medicine, water and other types of liquids.
  - Heavy objects
- **Be sure to lower the eight adjusters of the control panel and seat sections to the surface and stabilize the cabinet. If not stabilized, it may result in personal injury or accidents.**
- **Set up the cabinet according to the explanations and procedures listed in this user's manual. If these are not followed correctly, there is a danger of accidents involving electric shock and other personal injuries.**
- **Use the cabinet with indoor wiring meeting the proper voltage specifications. Failing to do so may cause fire or electric shock.**
- **Absolutely do not use numerous appliances on one outlet. It may result in fire or electric shock.**
- **Do not damage, bend, or placing heavy or hot objects on the power cord. If the cord is damaged, this may cause accidents involving fire and electric shock.**

Warning

- **Do not place the power cord in areas where people can step on or kick it. This may result in personal injury and accidents.**

Attaching the Billboard

(1) Attach the billboard to the operating section's lamp box with the six cross, pan head 3-point screws (M4 × 10).



- **Before beginning assembly, have a footstool ready and use it for assembling parts. Trying to assemble parts without a footstool may cause accidents and personal injury.**
- **Be sure to tighten screws securely.**
  If screws become loose, this may damage parts and cause accidents.
- **Prepare enough space to safely set up the cabinet. Failing to do so may cause accidents and personal injury.**

Turning on the Machine and Checking Operations

■ Turn on the machine.

(1) Check to see if the power switches inside the service door and the rear power section are switched off.

(2) Plug the AC cord into the outlet.

(3) Connect the ground cable.

(4) Switch the power switches inside the service door and the rear power section on.

- **Be sure to attach a ground cable.**
  There is a danger of electric shock in the event of a short circuit, etc., if the ground cable is not attached.

- **When turning on the cabinet, do not touch the steering wheel.**
- **If both of the power switches are not switched on, the cabinet will not operate.**

■ Checking Operations

(1) The fluorescent light turns on.

(2) After the power has been turned on, the RAM TEST will automatically begin. If all displays show [OK], the next display will appear. For a few seconds at this time, each lamp will turn on and off.

(3) After the crosshatch screen appears for a few seconds, the screen will change to the "Network Check" screen.

(4) The "Network Check" screen will be displayed for about 40 seconds whether the cabinet is connected for communication competition or not. After this, the game screen will then appear. At the same time the "Network Check" screen is displayed, the steering wheel will automatically straighten itself out.

- **During the "Network Check," absolutely do not touch or try to use the steering wheel, pedal, shift lever and switches. This will cause the cabinet to malfunction.**
- **If the steering wheel does not return to its home position, check the connections again.**

■ Test Mode

When you press the Test switch inside the service door, the Test Mode begins.
Settings and adjustments you can make in the Test Mode are listed below.

Test Contents

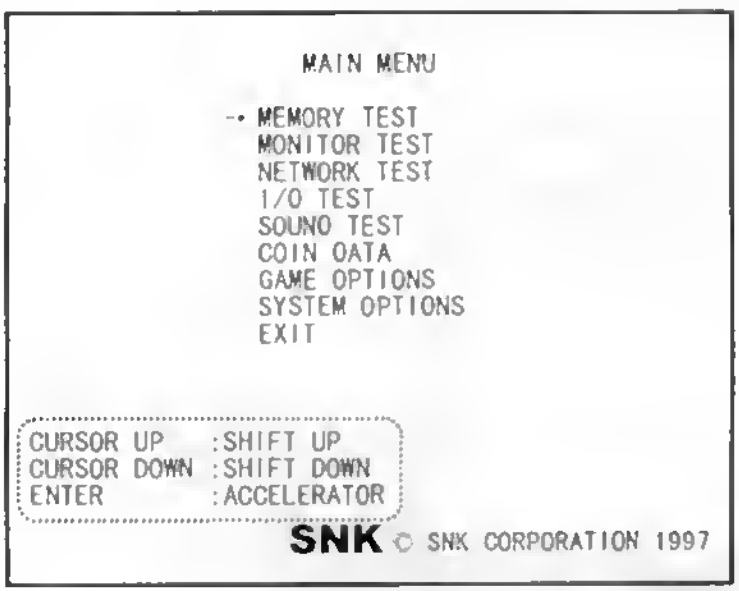
- **MEMORY TEST (Memory check)**
  Checks the read/write capabilities of the RAM device.
- **MONITOR TEST (Display check)**
  A screen display for adjusting the monitor.
- **NETWORK TEST (Communication check)**
  Displays the condition of communication between cabinets.
- **I/O TEST (I/O check)**
  Checks all types of input devices.
- **SOUND TEST (Sound check)**
  Checks the output of all sound-system devices.
- **COIN DATA (Income totals)**
  Shows coin/play totals.
- **GAME OPTIONS (Game settings)**
  Sets game difficulty levels, etc.
- **SYSTEM OPTIONS (Cabinet settings)**
  Sets all cabinet characteristics.

While conducting the Test Mode with multiple cabinets connected in a linked communication network, be careful of the points below.

- Check whether all power switches of the connected cabinets are on. If there is one cabinet where both switches are not on, settings will become jumbled.
- When a number of cabinets are connected in a communication network and the Test button is pressed, all connected cabinets will enter the Test Mode. If there is a cabinet that is in operation, do not push the Test switch.
- During communication play, when a communication error occurs, the game will be forcefully stopped and cabinets will enter the Network Test Mode.

MAIN MENU

SCREEN DISPLAY



ACTIVATION METHOD

During the game, when the Test button is pressed, this menu is displayed.

BASIC OPERATION INSTRUCTIONS

1. Move the arrow (→) with the shift lever and match it to the item you wish to change.
   - CURSOR UP: The cursor moves up.
   - CURSOR DOWN: The cursor moves down.

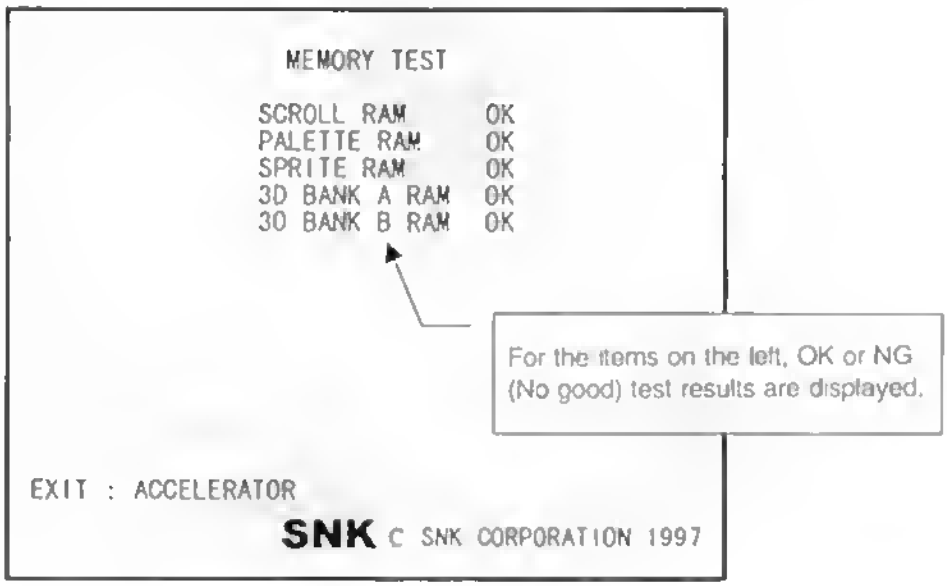
2. Make settings according to the operation instructions in the lower left corner of the screen. (There is an operation explanation for each selected item.)
   - ENTER: Step on the accelerator (pedal) to call up the item contents.
   - CHANGE: When you step down on the accelerator or brake, the item contents will change

3. Choose the EXIT display in each item and step on the accelerator to return to the previous screen.

END: To get out of the Test Mode, match the cursor to EXIT and step down on the accelerator. (Restart the cabinet to go to the game.)

MEMORY TEST

SCREEN DISPLAY



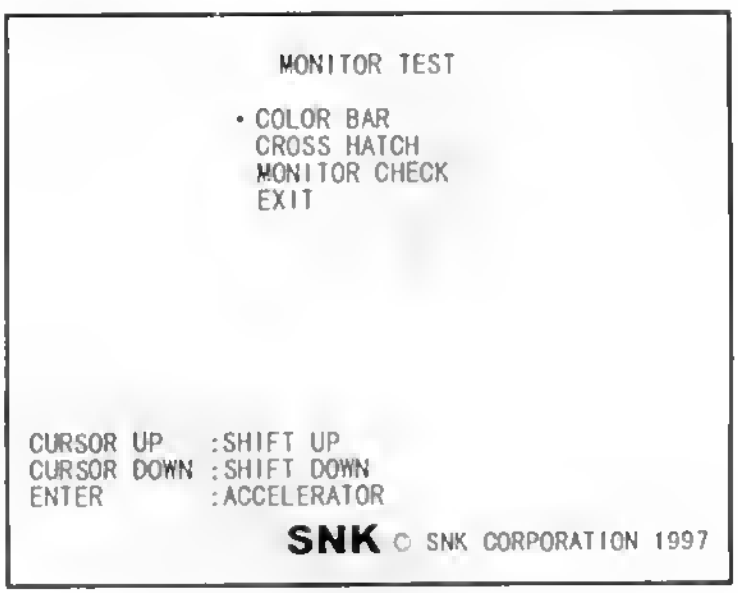
OPERATIONS

The memory is checked automatically and if there is nothing wrong an "OK" will appear. If there is something wrong, an "NG" is displayed.

* When an "NG" message appears, quickly turn the cabinet off and contact your distributor.

MONITOR TEST

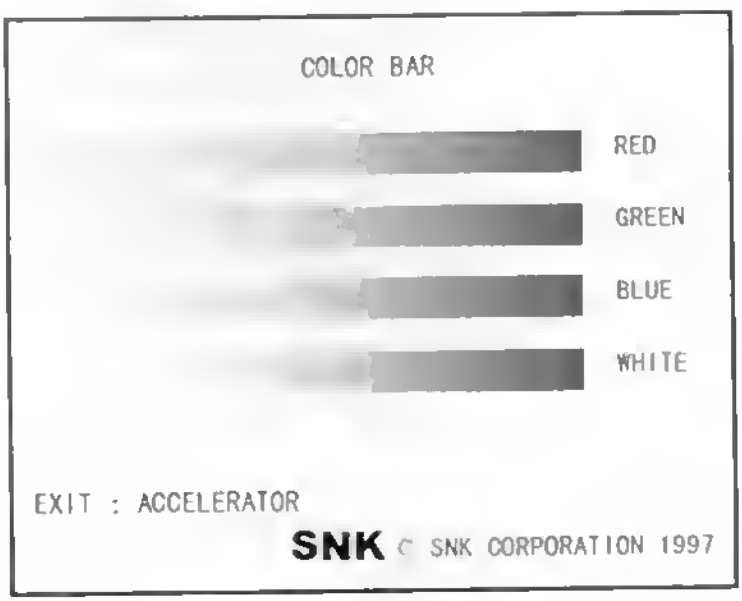
SCREEN DISPLAY



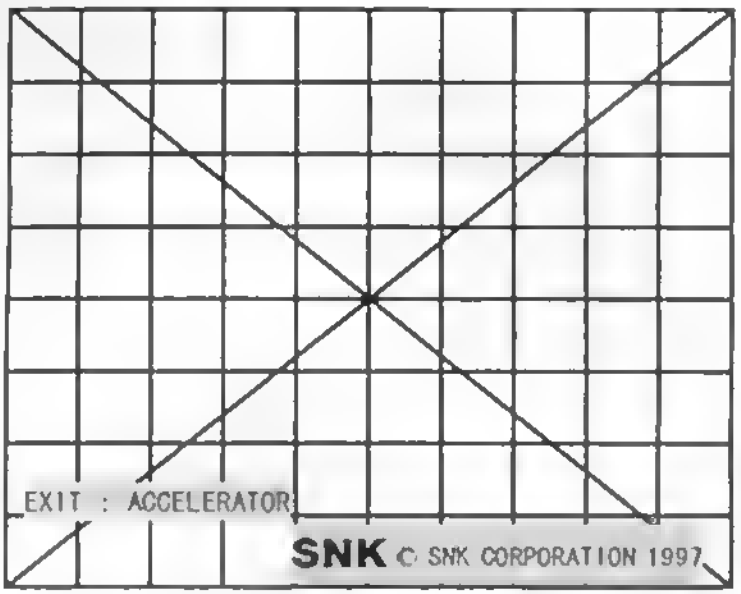
FUNCTIONS

The test pattern for adjusting the monitor is displayed. Three types of screens are displayed: a color bar for correcting color tones, the crosshatch for correcting image and size distortions, and the monitor adjustment screen.

1. COLOR BAR (Color Tone Adjustment)



2. CROSS HATCH [Positioning Adjustment]

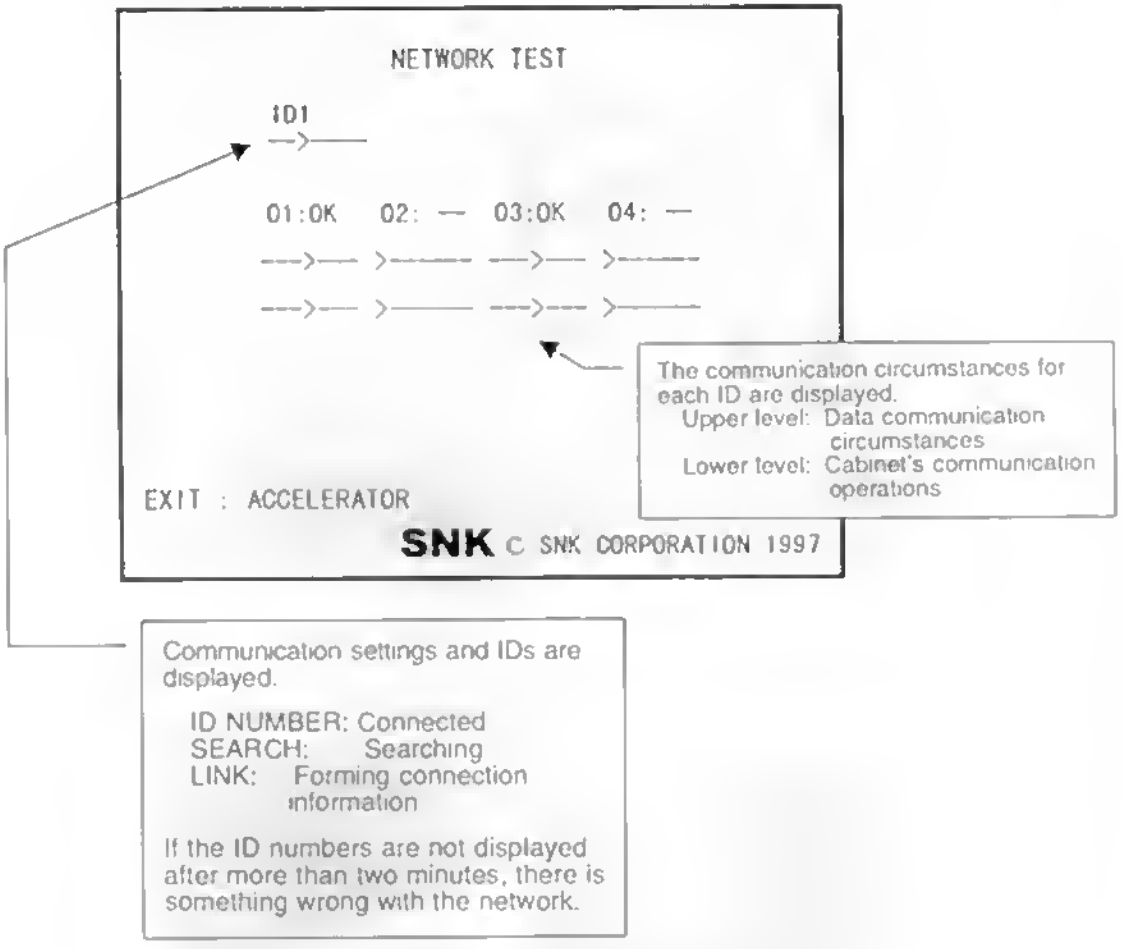


3. MONITOR CHECK [Screen Adjustment]

Based on sample images, color misalignment, rasters, display scaling, brightness, contrast, sizes possible for stabilized displays, and screen center images are examined.

NETWORK TEST

SCREEN DISPLAY



FUNCTIONS

Checks communication settings and displays communication circumstances.

ID CHECK

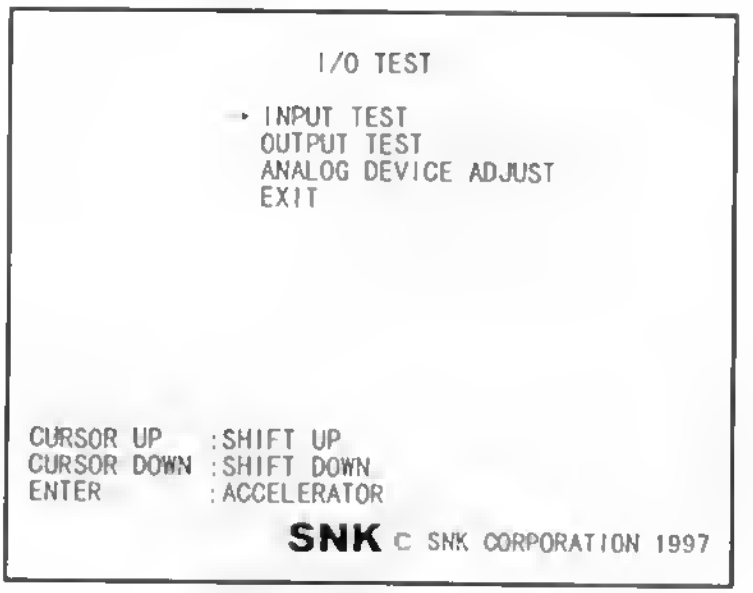
Displays the ID number of the cabinet and the ID numbers of each connected cabinet.

SYNCHRONIZING CHECK

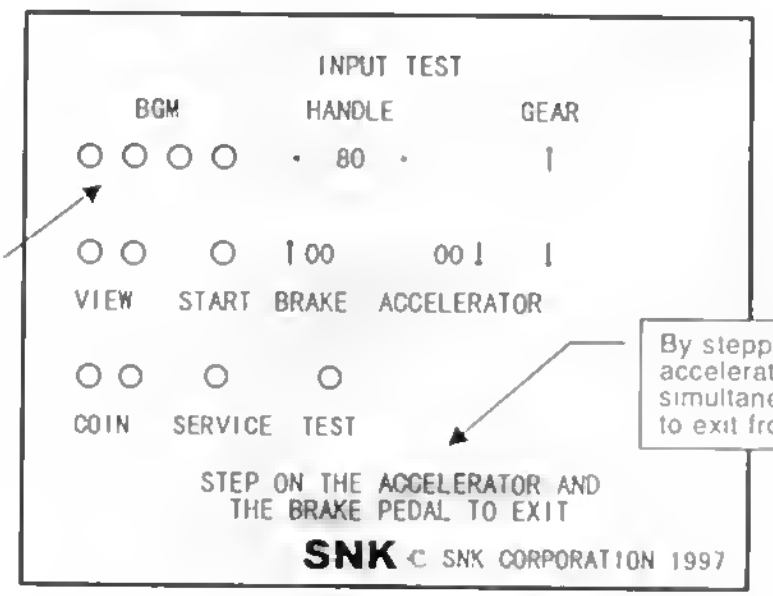
Displays communication circumstances.

I/O TEST

SCREEN DISPLAY



1. INPUT TEST



Input data is reflected on successive screens.

By stepping down on the accelerator and brake simultaneously, it is possible to exit from this screen.

CHECK CONTENTS

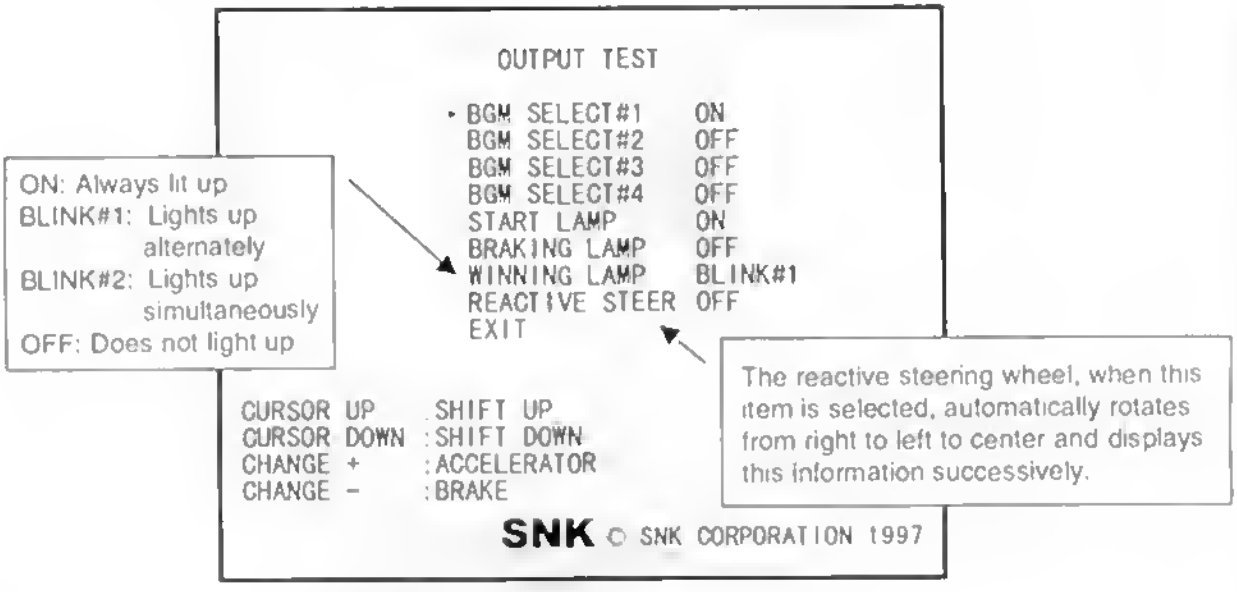
Steering wheel, accelerator, and brake input is carried out through analog input.

- The steering wheel center value is "80," turning all the way to the left is "0," and turning all the way to the right is "FF."

  *Steering wheel 1-digit values can vary slightly, but this is normal.

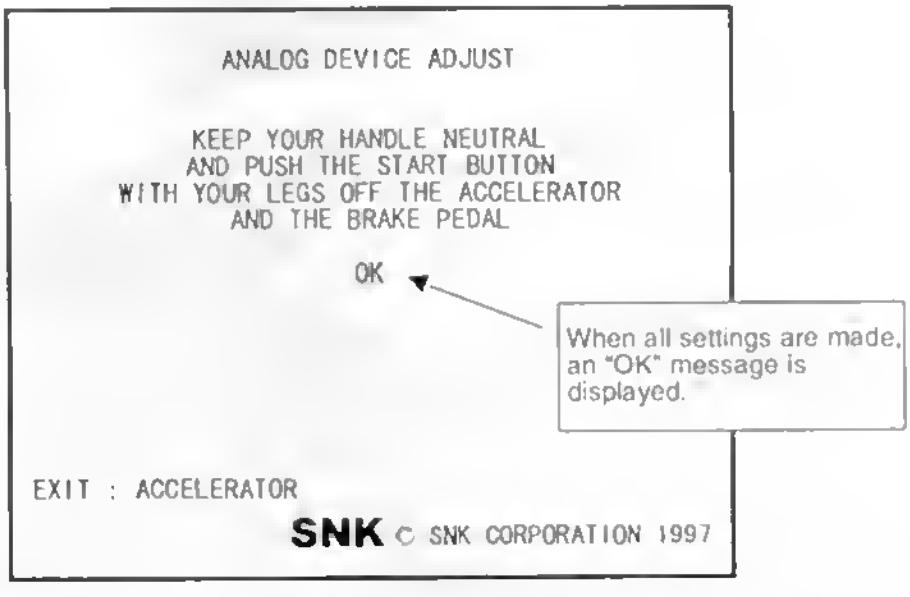
- If the brake and accelerator are not being stepped on, a full left turn "0" condition is represented as "FF."

2. OUTPUT TEST



There are four types of winning lamp patterns.
When the reactive steering item is selected, a warning message is displayed

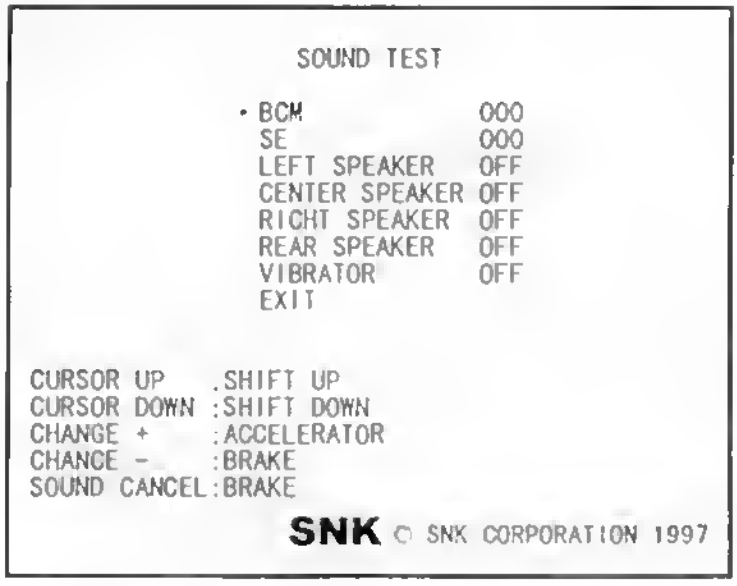
3. ANALOG DEVICE ADJUST [Sets basic analog standard values]



When you press the Start button with the steering wheel in neutral and your feet off the accelerator and brake, you can match the centers of each part.
* The Start button is deactivated when you step down on the accelerator.

SOUND TEST

SCREEN DISPLAY



FUNCTIONS

Performs tests of music and sound effects.

1. BGM (Background music)

- When selected, the BGM will begin to play simultaneously. (All sounds playing beforehand will be canceled.)
- After selection, this is played only for 10 seconds.
- You can cancel the test by stepping down on the brake when the sound is playing.

2. SE (Sound Effects)

- When selected, the sound effects will begin to play. (All sounds playing beforehand will be canceled.)
- After selection, this is played only for 10 seconds.
- You can cancel the test by stepping down on the brake when the sound is playing.

3. LEFT SPEAKER

- Based on the view from the seat, plays sound through all speakers on the left side.
- The sound will continue until the brake is stepped on or another item is selected.

4. CENTER SPEAKER

- Plays sound through the right and left speakers.
- The sound will continue to until the brake is stepped on or another item is selected.

5. RIGHT SPEAKER

- Based on the view from the seat, plays sound through all speakers on the right side.
- The sound will continue until the brake is stepped on or another item is selected.

6. REAR SPEAKER

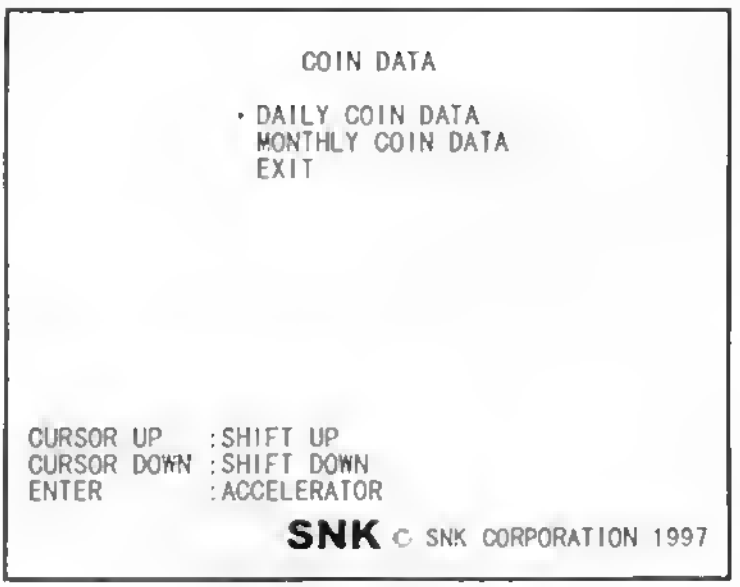
- Plays sound through the speakers located in back of the seat.
- The sound will continue until the brake is stepped on or another item is selected.

7. VIBRATION DEVICE

- Sends sounds through the vibration device located under the seat.
- The sound will continue to until the brake is stepped on or another item is selected.

COIN DATA

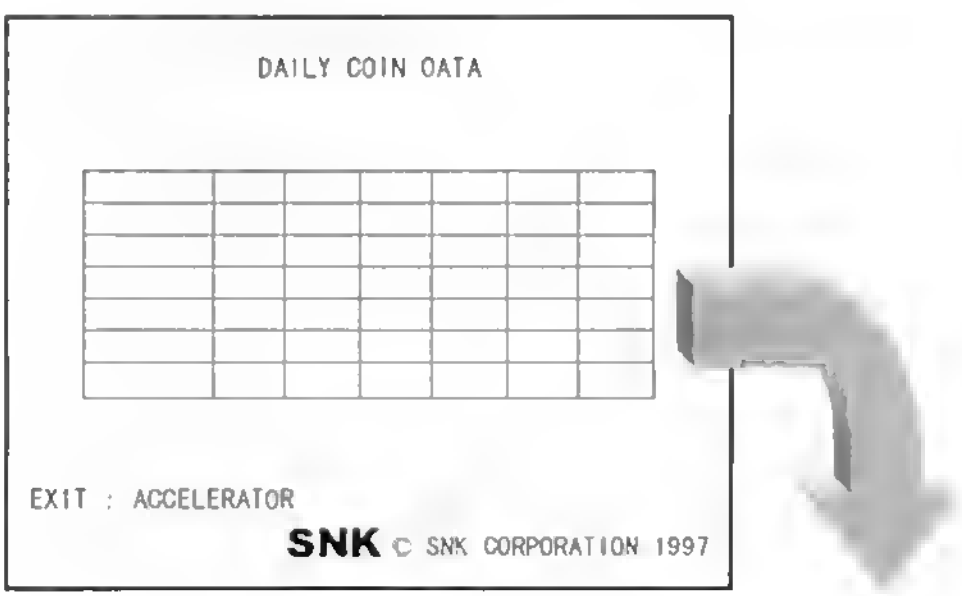
SCREEN DISPLAY



FUNCTIONS

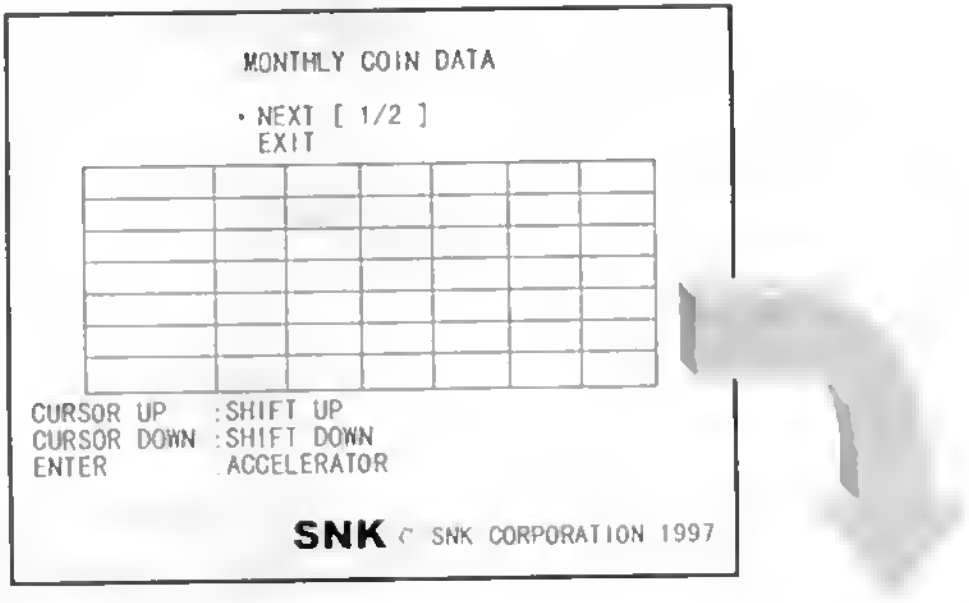
- The coin data for all cabinets linked through the network is displayed.
- Income total data and play frequency data is displayed.
  1. Totals for the past week by time
  2. Totals for the past year by month.

1. DAILY COIN DATA



	PLAY	CONT.	TIME	COIN1	COIN2	SERVICE
06/09 MON						
06/10 TUE						
06/11 WED						
06/12 THU						
06/13 FRI	28	--	02:30	28	0	0
06/14 SAT	43	--	03:55	40	2	1
06/15 SUN	55	--	03:12	51	3	1
	Play frequency	Continue frequency	Average play time	Number of coins 1	Number of coins 2	Service frequency

2. MONTHLY COIN DATA



	PLAY	CONT.	TIME	COIN1	COIN2	SERVICE
97/01 JAN						
97/02 FEB						
97/03 MAR						
97/04 APR						
97/05 MAY	511	--	3:30	501	0	0
97/06 JUN	1578	--	3 51	1520	25	12
	Play frequency	Continue frequency	Average play time	Number of coins 1	Number of coins 2	Service frequency

GAME OPTIONS

SCREEN DISPLAY

FUNCTIONS

- Sets software dip settings, such as game difficulty, etc.
- Settings for basic game contents is done here.
- When making connections for a communication network, if there is a faulty connection or a cabinet's items (GAME OPTIONS) are changed, all settings are simultaneously changed for the other cabinets.

1. DIFFICULTY

① EASY
② NORMAL
③ HARD
④ HARDEST

Total: 4 types
Initial settings: "NORMAL"

2. NUMBER OF LAPS (TRIAL)

	① SHORT	② NORMAL	③ LONG	④ LONGER	⑤ LONGEST
Beginner	2	3	4	5	20
Intermediate	2	3	4	5	18
Advanced	1	2	3	4	15

Total: 5 types
Default: "NORMAL"

Sets the standard laps of the Trail Mode.

3. NUMBER OF LAPS (VS PLAY)

	① SHORT	② NORMAL	③ LONG	④ LONGER	⑤ LONGEST
Beginner	1	2	3	5	20
Intermediate	1	2	3	5	18
Advanced	1	2	3	4	15

Total: 5 types
Default: "NORMAL"

Sets the standard laps of the Competition Trial Mode.

4. SPEED DISPLAY

(1) km/h – Displays the speed meter units in kilometers per hour.
– Displays distance meter units in meters.
– Displays course information in meters.

(2) MPH – Displays speed meter units in miles per hour.
– Displays distance meter units in miles.
– Displays course information in miles and feet.

Total: 2 types
Initial setting: "km/h"

5. DEMO SOUND TRACK

① ALL THE TIME	Plays music all the time during demo screens.
② ONCE EVERY 2	Plays music once every two demo screens.
③ ONCE EVERY 4	Plays music once every four demo screens.
④ BGM OFF	Doesn't play music during demo screens.
⑤ SOUND OFF	Doesn't play any sound during demo screens.

Total: 5 types
Initial setting: "ALL THE TIME"

"DEMO PLAY" is the only item where you can choose whether sound plays or not.

6. LANGUAGE

① JAPANESE
② ENGLISH

Total: 2 types
Initial setting: Domestic version – "JAPANESE", Overseas version – "ENGLISH"

7. TRAFFIC LANE

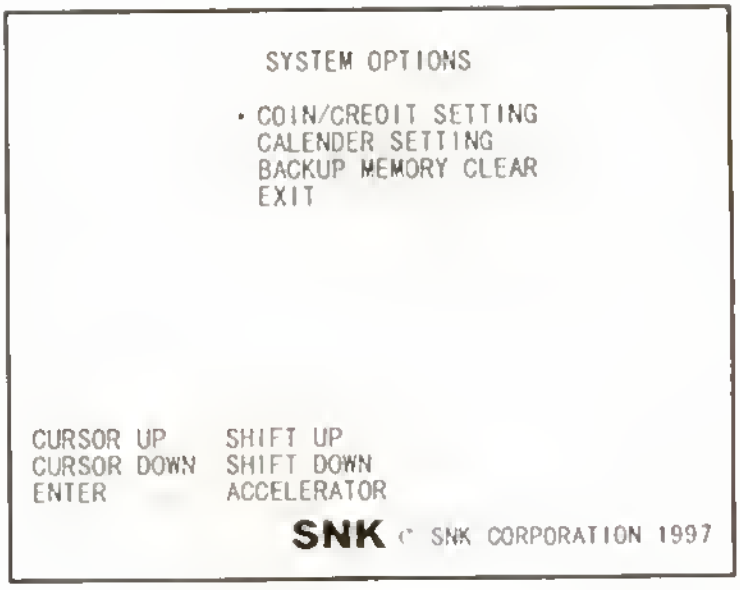
① LEFT
② RIGHT

Total: 2 types
Initial settings: Japanese – "LEFT"; Overseas version – "RIGHT"

Decides whether other cars drive mainly on the right or left sides.

SYSTEM OPTIONS

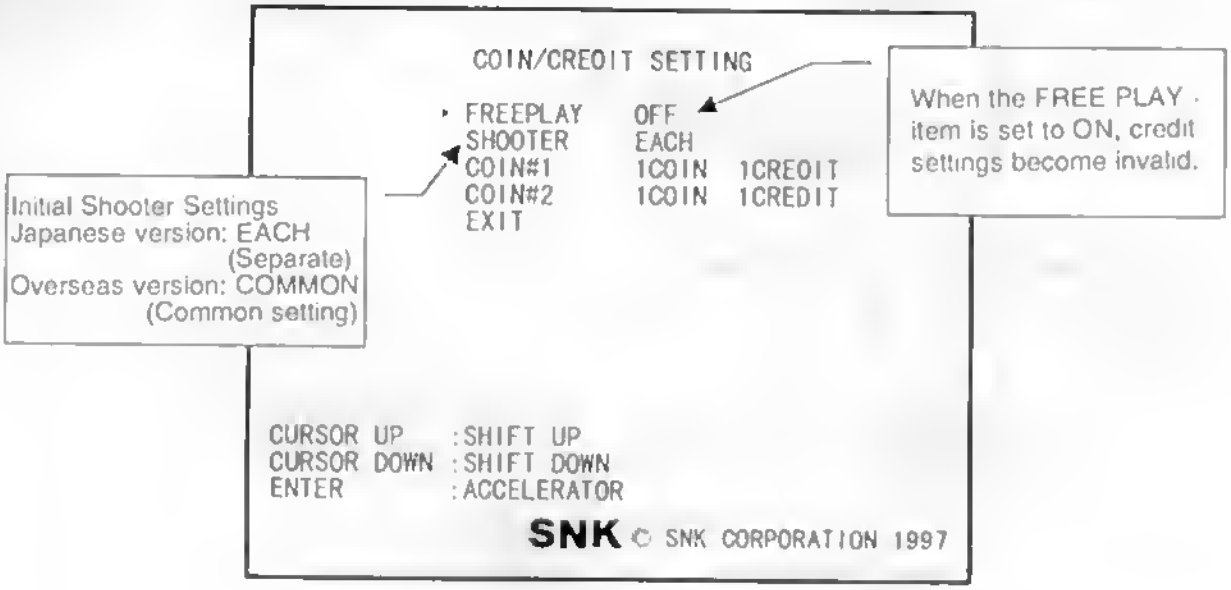
SCREEN DISPLAY

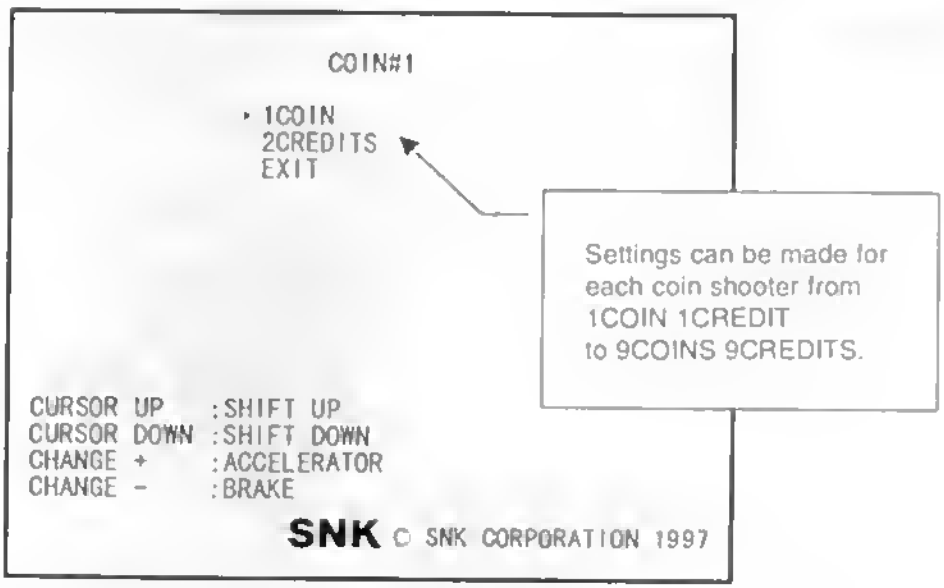


FUNCTIONS

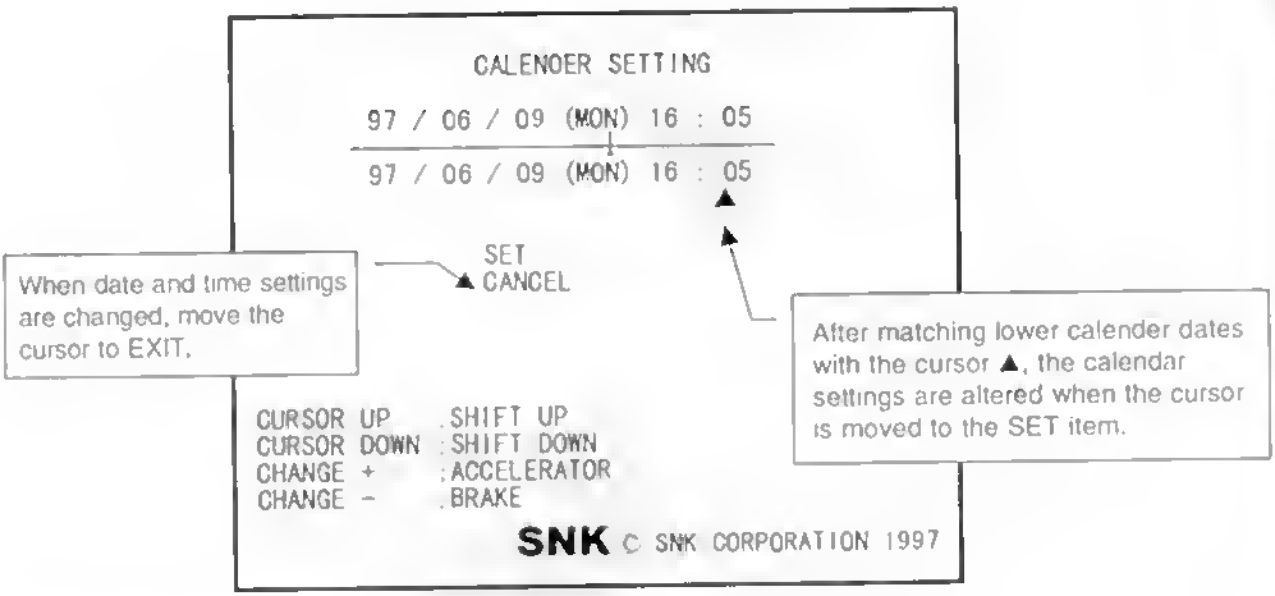
- When the communication network is set up, making item changes (SYSTEM OPTIONS) on any one of the cabinets will simultaneously alter settings on the other cabinets.
- Performs system information settings.
    1. Sets coin shooter and credits
    2. Sets the calendar.
    3. Initializes the back-up memory

1. COIN/CREDIT SETTING

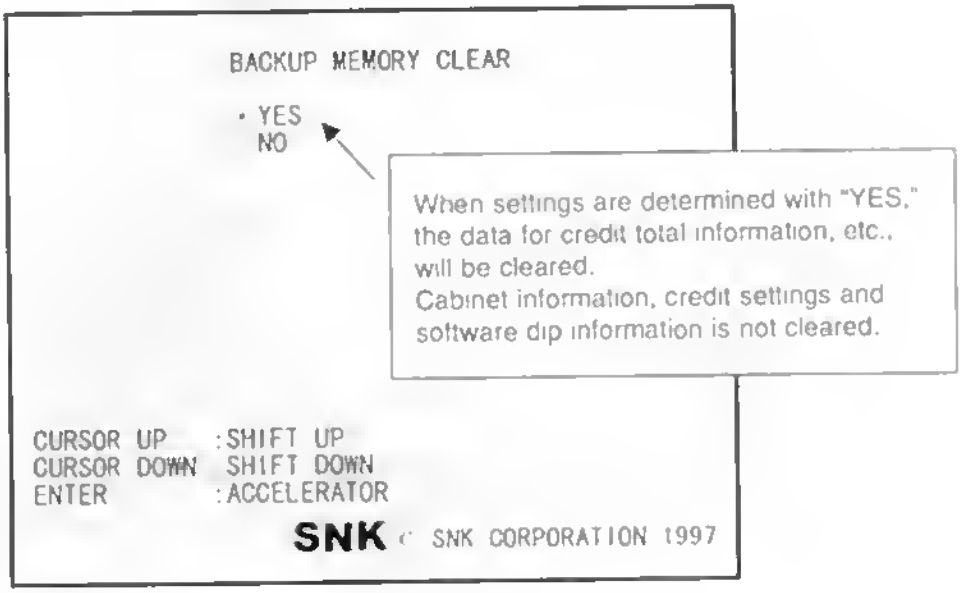




2. CALENDER SETTING



3. BACKUP MEMORY CLEAR



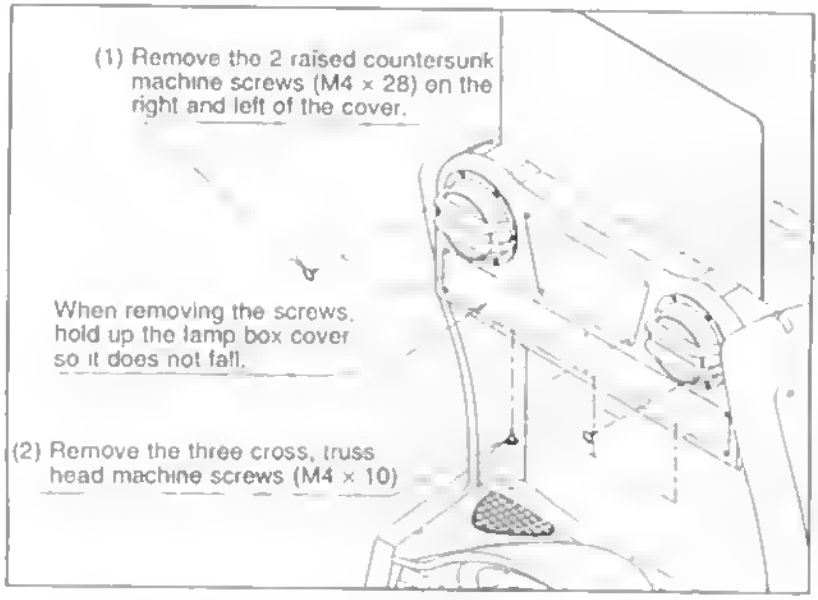
■ Maintenance

Changing Fluorescent Lights and Lamps

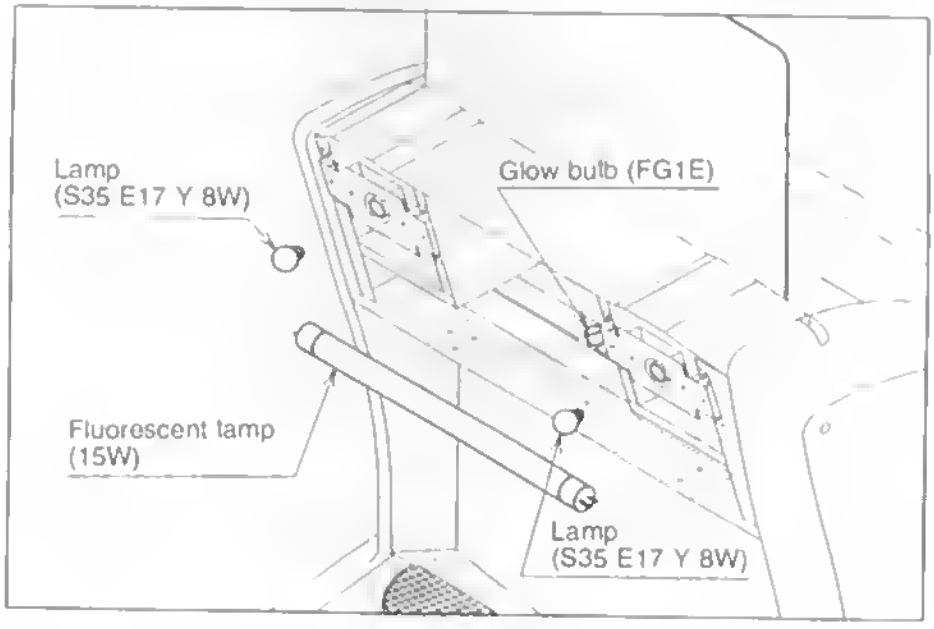
■ Methods for Changing Fluorescent Lights and Lamps in the Control Panel Section.

(1) Remove each of the two raised countersunk machine screw in the left and right sides of the lamp frame.

(2) Remove the three cross, truss head machine screw at the bottom of the lamp box cover and take off the lamp box cover.



(3) Remove the fluorescent light (15 W), the glow bulb (FG1E), and the lamp (S35 E17Y8W). Replace these with new ones.

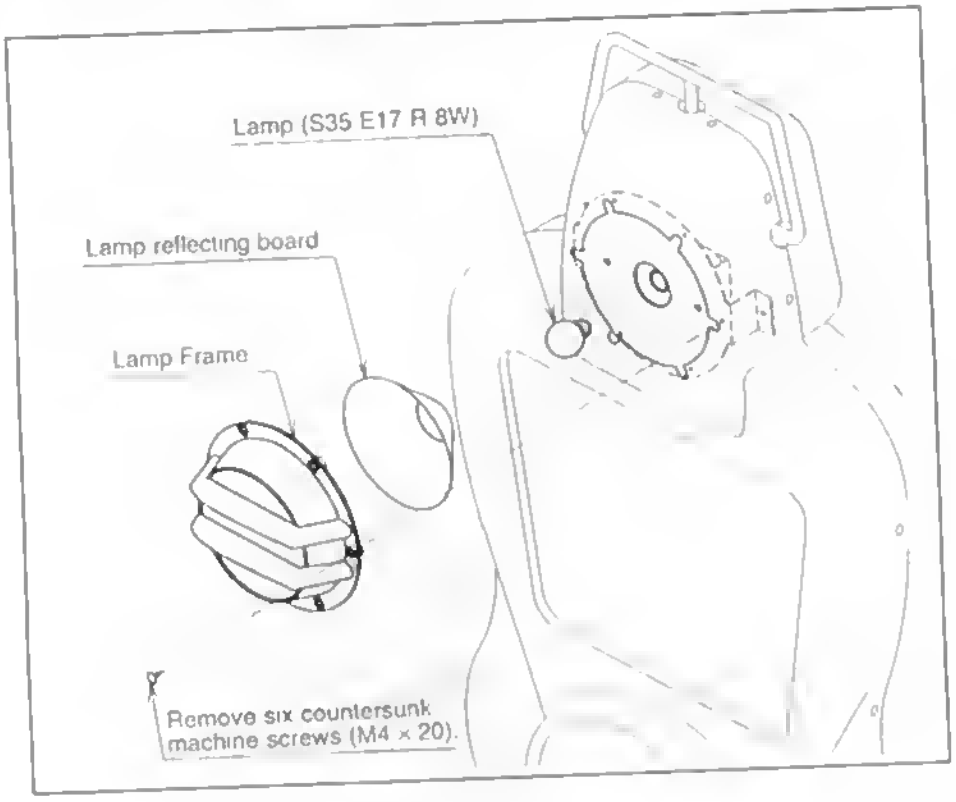


(4) Put the lamp box back together following the procedures in reverse.

■ Seat section: Exchanging Lamps

(1) Remove the six raised countersunk machine screw of the lamp frame.

(2) Remove the lamp (S35 E17 R 8W) and replace it with a new one.



Danger

- Make sure these operations are done with the power off.
  This can cause accidents involving electric shock and personal injury.
- During replacement procedures, do not touch any other areas than those indicated.
  This can cause personal injury and accidents.
- Do not use replacement parts other than those designated by the SNK Corporation.

Warning

- Make sure all screws are screwed in tightly. If screws become loose, it may damage parts or cause accidents.
- Because lamps and fluorescent lights become very hot right after the cabinet is turned on, wait a while before beginning to replace lights and lamps.

Control Panel

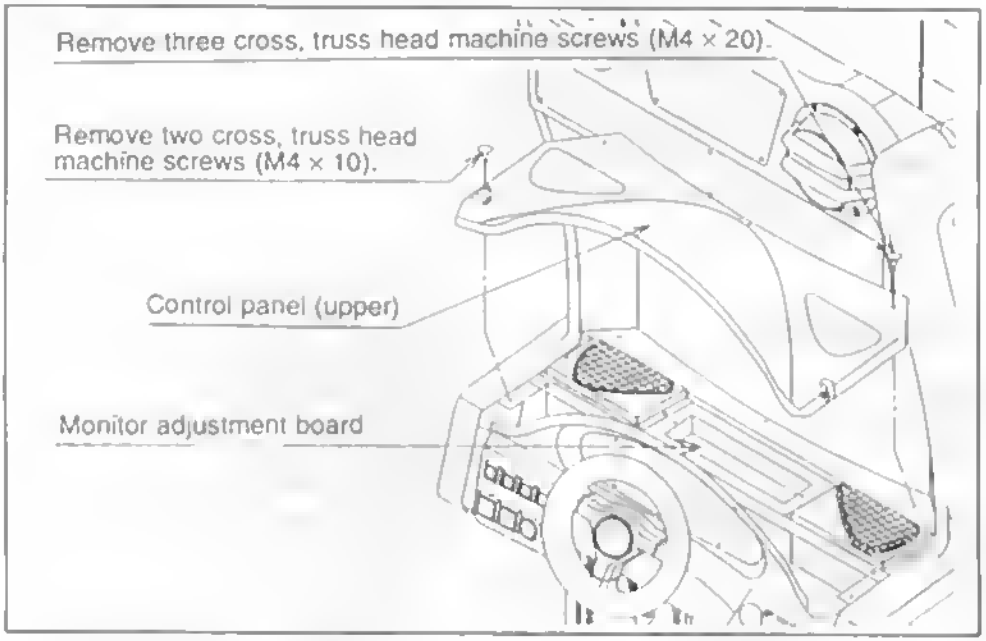
On the Test Mode screen, when the volume values of the steering wheel are shown to be abnormal, it is necessary to change the volume. For volume value changes, see p. 23.

Abnormal examples

- Even when the steering wheel is turned all the way, a "0" or "FF" reading does not appear.
- Even when the steering wheel is not turned all the way, a "0" or "FF" reading appears.

■ Removing the Control Panel Assembly

(1) Remove the five screws shown in the diagram below and remove the upper control panel.



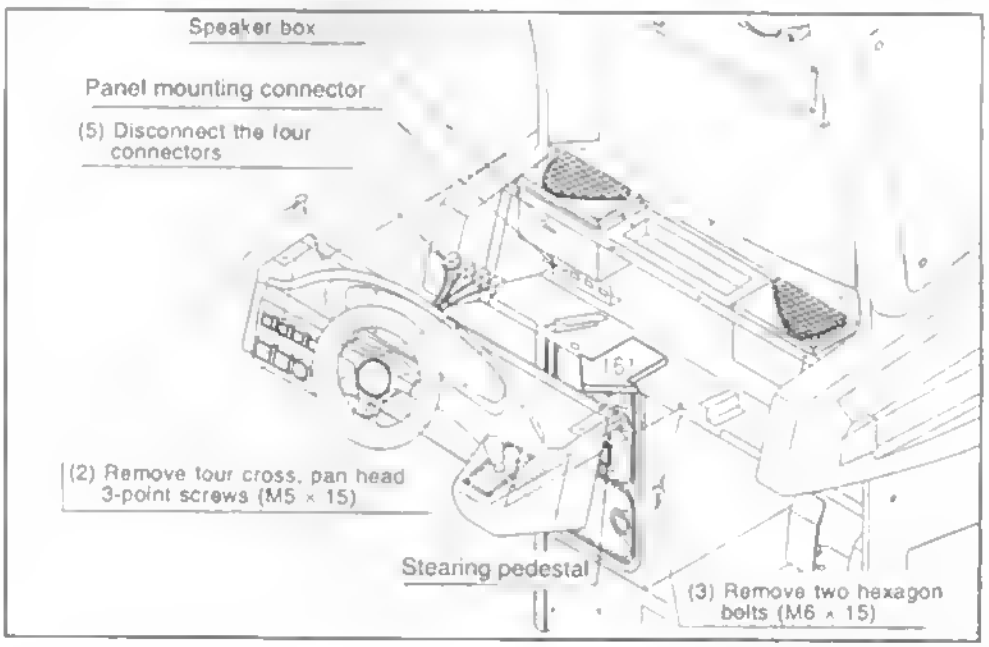
(2) Remove the four cross, pan head 3-point screws (M5 × 15) on the upper surface shown in the diagram below.

(3) Remove the two hexagon bolts (M6 × 15) of the lower area shown in the diagram below.

(4) Pull out the control panel assembly forward until there is a gap you can fit your hand into.

(5) With your right hand, support the control panel assembly and remove the four connectors with your left hand.

(6) Pull out the control panel assembly at the end.



Danger

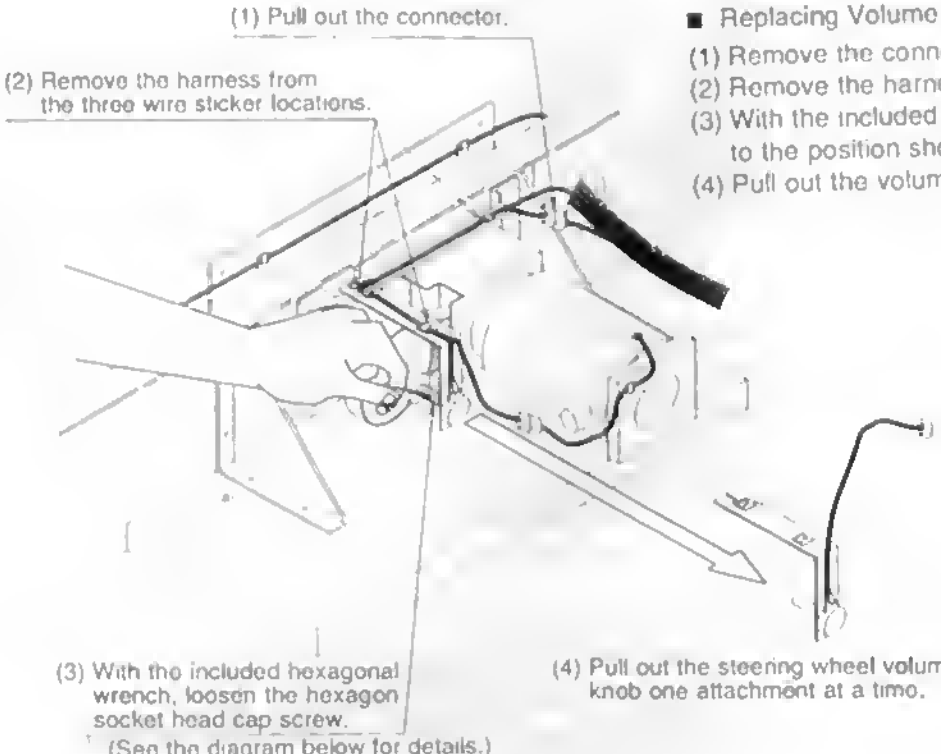
- Make sure the power has been turned off before beginning to replace parts. Failing to do so may cause accidents involving electric shock and personal injury.

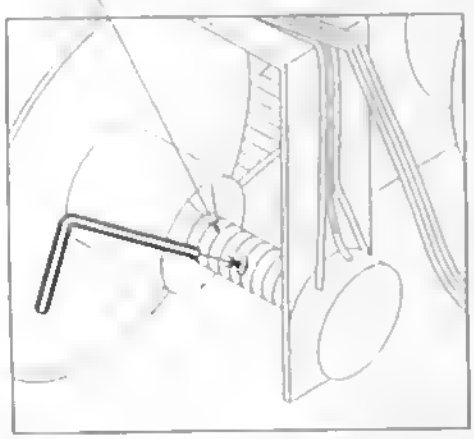
Warning

- Because the control panel unit is very heavy at 12 kg, perform procedures carefully.
- Directly after the game is finished, because the motor is still extremely hot, wait a while after the game before beginning to remove parts.
- When the control panel is pulled forward, be sure to support it with your hand. Failing to do so may damage the panel and cause accidents.
- Be sure to hold the housing when removing connectors. Pulling on the cords will damage them.

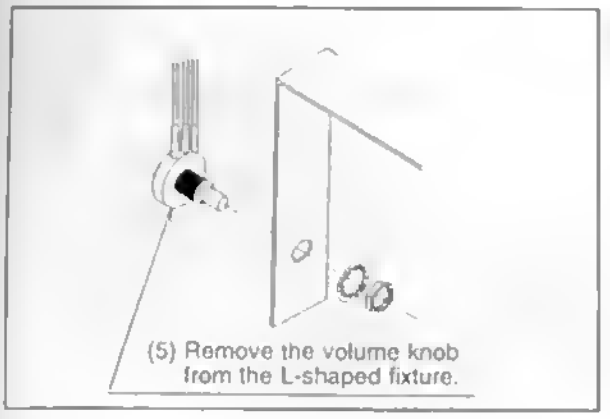
■ Replacing Volume Knobs

(1) Remove the connectors shown in the diagram below.
(2) Remove the harness from the wire stickers.
(3) With the included hexagonal wrench, loosen the screw to the position shown in the diagram.
(4) Pull out the volume by one attachment at a time.

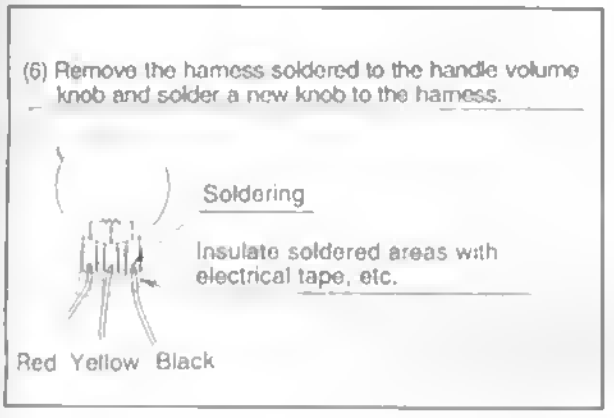




* Loosening the hexagon socket head cap screw is sufficient. If these are removed, be careful not to lose them.



(5) Remove the volume knob from the attachment fixture.



(6) Remove the harness and solder on a new knob.

(7) Reassemble mechanisms following the processes above in reverse.

Warning

- **After soldering parts together, be sure to insulate these with electrical tape, etc. Without insulation, these may cause accidents involving electric shock.**

■ Attaching the Control Panel

Reassemble following the removal procedures above in reverse.

Warning

- **At the time of assembling parts, be careful not to pinch harnesses. This may cause damage to the cabinet.**

■ Adjusting Volume

(1) Turn on the cabinet and go to the "Analog Standard Value Settings" item of the Test Mode. (See p. 24.)

(2) In the Test Mode's "Input Test," check to see if the cabinet is operating properly. (See p. 23.)

Danger

- **Following removal and replacement procedures, do not touch areas other than those indicated. Doing so may cause injury and accidents.**

Warning

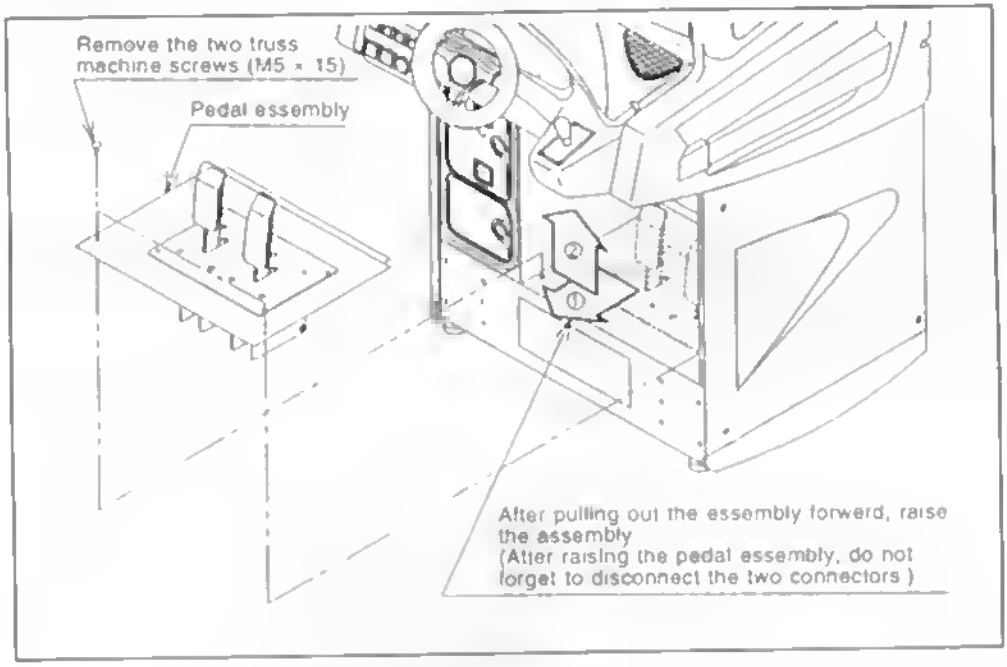
- **After replacing the volume knob, be sure to perform necessary adjustments. If these are not made, there are cases where the game will not operate normally.**
- **Make certain all screws are tightened. If screws become loose, they may damage parts and cause accidents.**

Pedal Assembly

■ Removing the pedal assembly.

(1) Remove the two screws and pull up the pedal assembly.

(2) When the two connectors are disconnected, remove the pedal assembly.

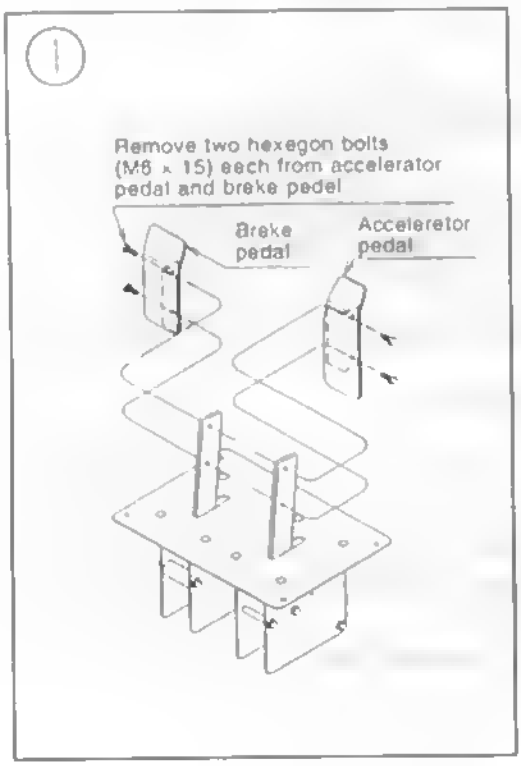


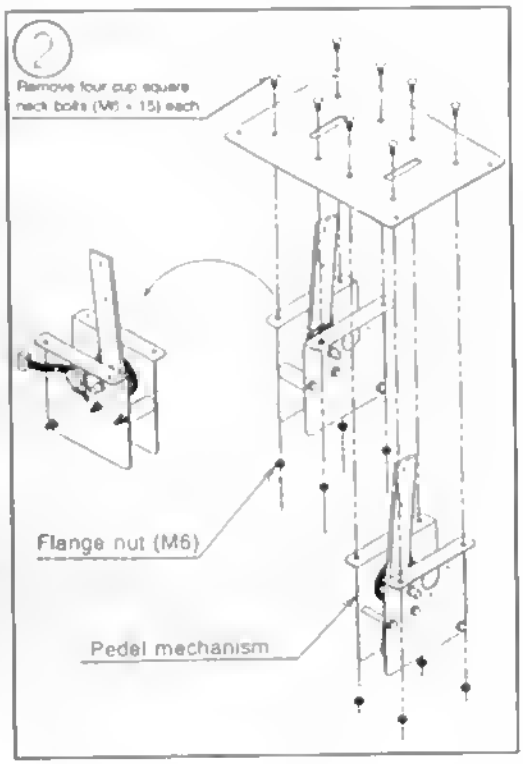
- **Make sure the power has been turned off when removing parts. Falling to do so may result in accidents from electric shock and personal injury.**

■ Replacing the Pedal Volume Knob

(1) Remove the two hexagonal bolts shown in the diagram below and remove the pedal.

(2) Remove the four nuts and remove the pedal mechanism.

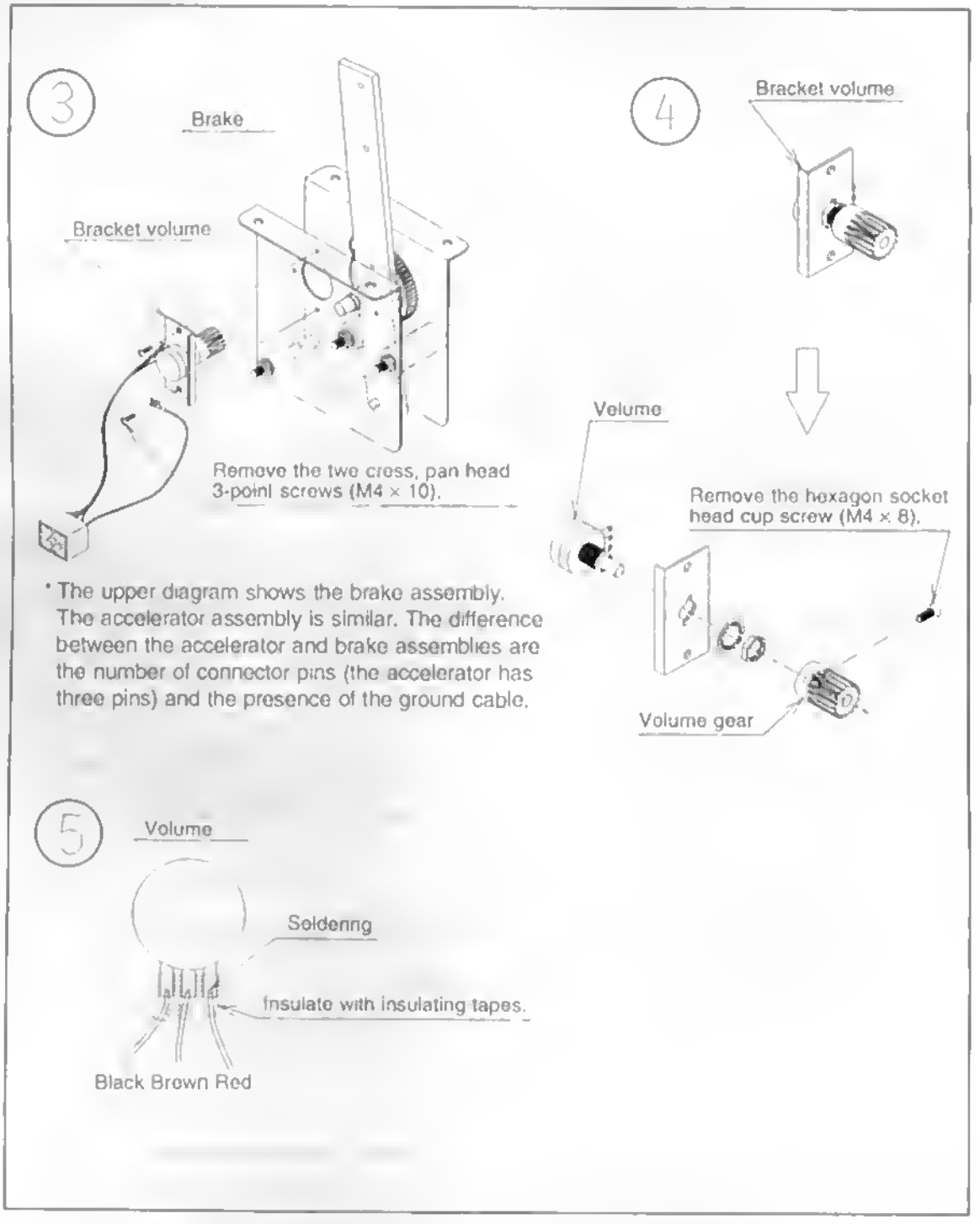




(3) Remove the fixtures (volume knob bracket) attached to the volume knob as shown in the diagram.

(4) Remove the volume knob from the fixtures.

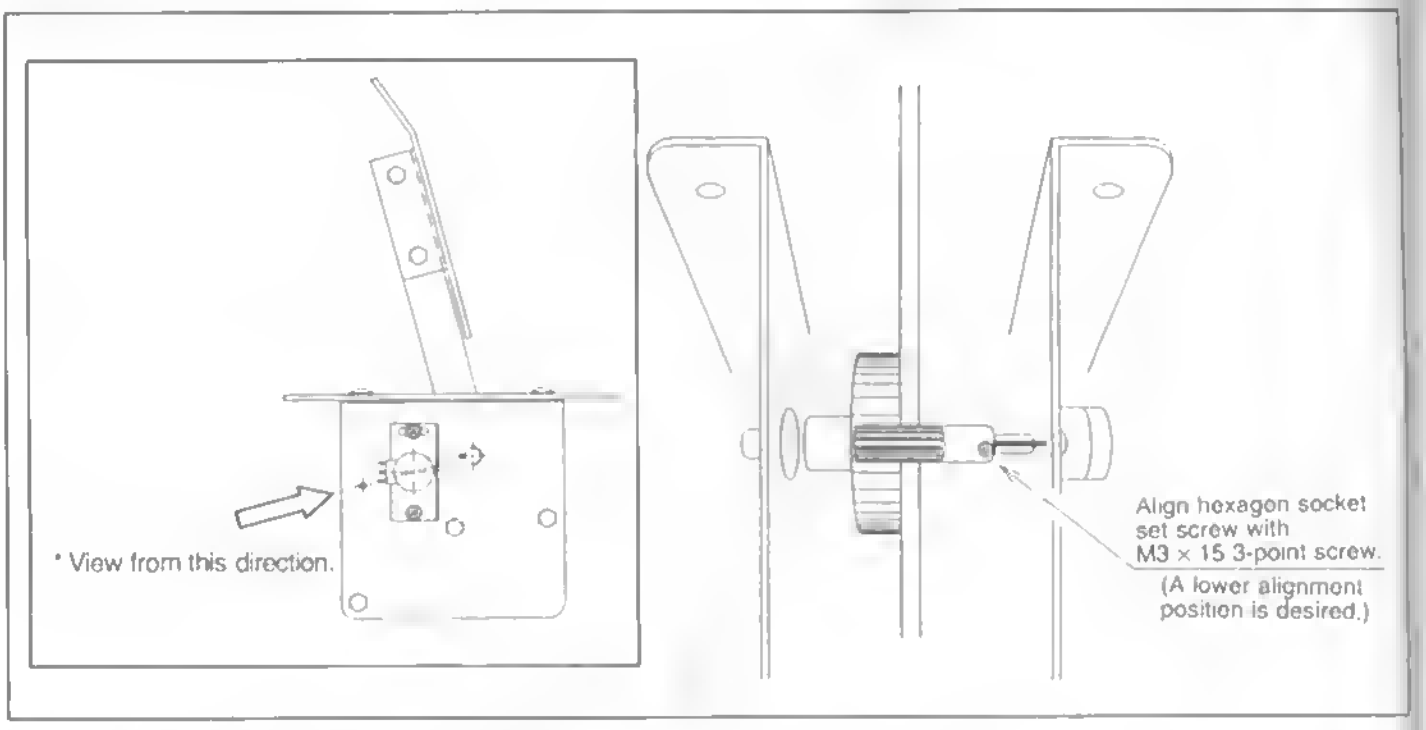
(5) Solder a new volume knob to the harness.



(6) Attach the new volume knob to the fixture.
* Referring to the step 4 diagram, be careful of the direction parts are assembled.

(7) Temporarily secure the volume knob attached to the fixture to the pedal mechanism.
* Do not forget to connect the ground cable to the brake assembly. (See step (3)).

(8) Adjust the gear alignment as shown in the diagram below.
* Be sure to make this adjustment. If speed control cannot be performed properly, the volume knob will be damaged.



(9) Tighten the attachment screws temporarily fastened in steps (7) and (9), and reassemble the pedal assembly.

(10) Attach the pedal assembly to the control panel section.

■ Adjusting Volume

(1) Turn on the cabinet and go to the "Analog Standard Value Settings" item of the Test Mode. (See p. 24.)

(2) In the Test Mode's "Input Test," check to see if the cabinet is operating properly. (See p. 23.)

Danger

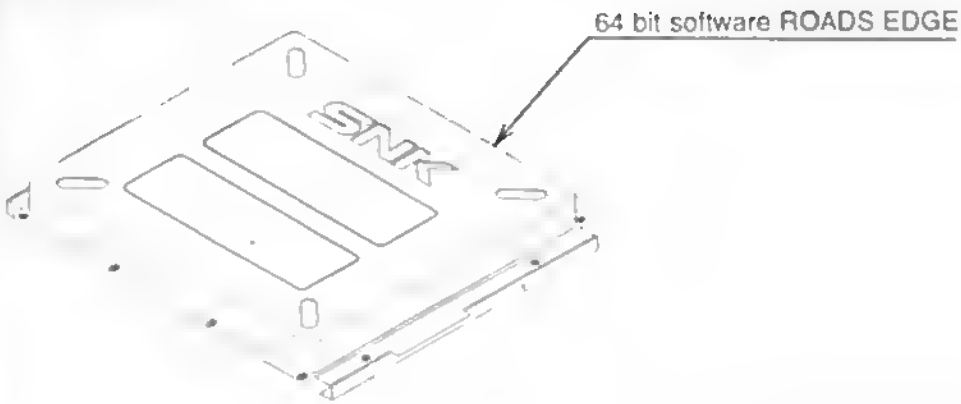
- **During removal and replacement procedures, do not touch areas other than those indicated.**
  Doing so may cause injury and accidents.

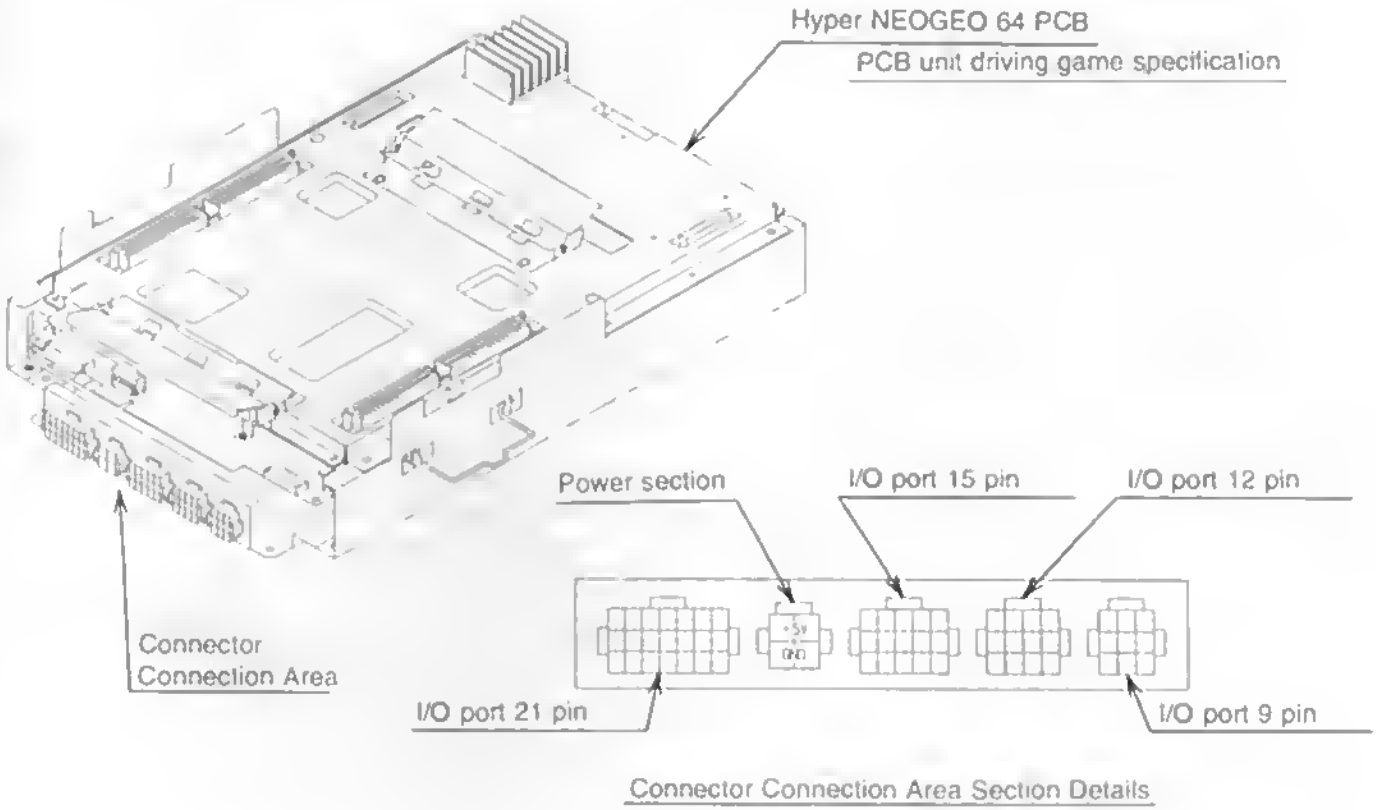
Warning

- **After replacing the volume knob, be sure to perform necessary adjustments.**
  If these are not made, there are cases where the game will not function normally.
- **Make certain all screws are tightened.**
  If screws become loose, they may damage parts and cause accidents.

■ Hyper NEO-GEO 64 PCB Unit

Explanation of Parts





Connector Connection Area Section Details

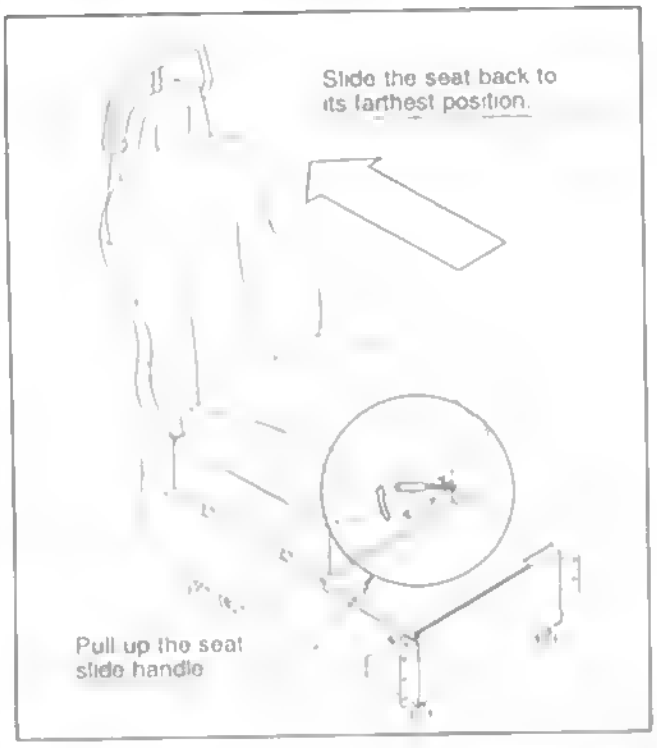
Warning

- **The PCB unit of the cabinet is customized for the Road's Edge cabinet. Do not use other Hyper NEOGEO 64 software cartridges.**
- **Do not take apart the PCB unit and software cartridge.**

Danger

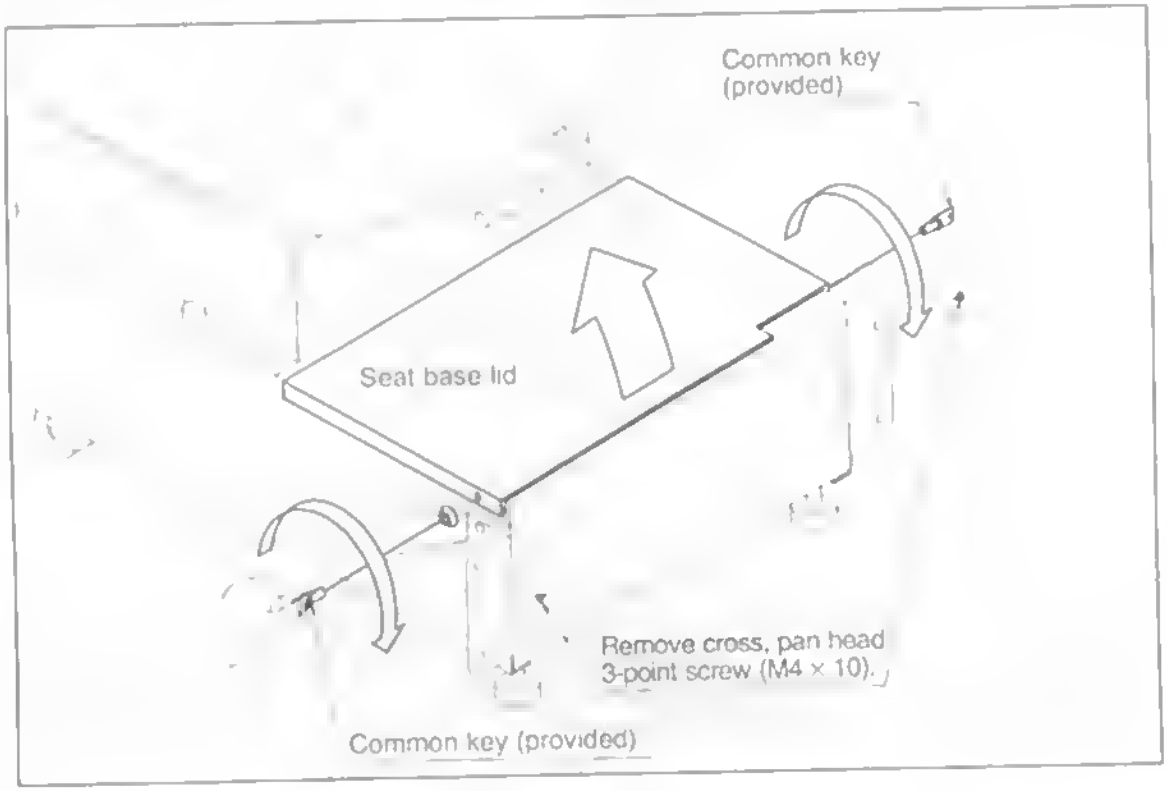
When removing/inserting software cartridges and replacing connector connection areas and unit parts, be sure to turn off the cabinet and unplug the power cord from the outlet. If procedures are done with the power on, this may cause accidents like electric shock and cause personal injury.

■ Inserting/Removing Software Cartridges



(1) Slide the seat back to its farthest position.

(2) Remove the two screws shown in the diagram. Next, use the included two common keys and open the seat base cover.



Danger

- When inserting/removing software cartridges, be sure to turn off the cabinet. Failing to do so may cause accidents involving electrical shock and personal injury.

Danger

When inserting software cartridges, be sure to turn off the cabinet and unplug the power cord from the outlet. Performing operations with the power on may cause accidents involving electrical shock and personal injury.

Installing Software Cartridges

First, while being careful of the position of the software cartridge as shown in diagram A, push the cartridge securely into the guides along the sides of the PCB unit. Install the cartridge into the connectors. After installing the cartridge, be sure to fasten the lock levers on the side of the PCB unit onto the software cartridge as shown in diagram B.

Diagram A
(Be careful of the positioning of the software cartridge.)

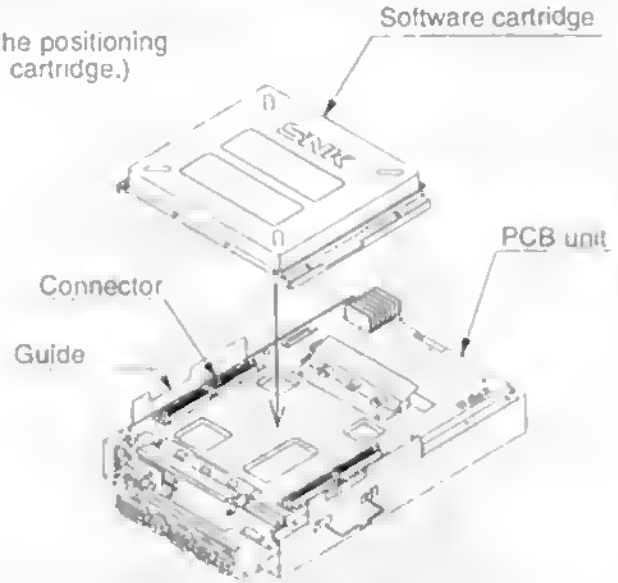
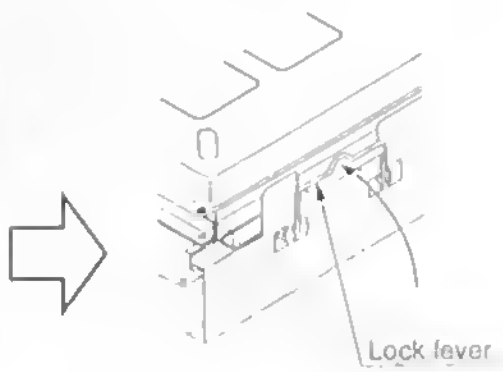


Diagram B



Warning

- **Be sure the lock levers on either side of the PCB unit are securely clamped onto the software cartridge. When the lock levers cannot be sufficiently clamped, because the installation is incomplete, push the software cartridge down securely into the connector.**
- **When the software cartridge is in use and at times of shipping, make sure such objects as foreign matter and conductive materials do not get into the connectors underneath the software cartridge.**

When Removing Software Cartridges

Pull back the lock levers 90° as shown in diagram C and release the locks. Next, push levers in the front and back of the software cartridge down together and remove the software cartridge.

Diagram C

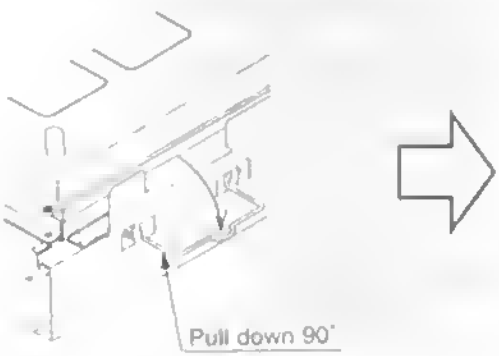
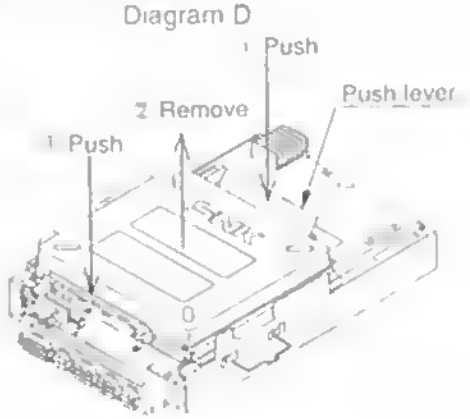


Diagram D



Warning

When installing (and removing) the software cartridge, do not touch the parts on top of the PCB and the various harnesses and plate edge sections, etc. This may damage the cabinet and cause personal injury.

■ Communication

This cabinet can perform communication play in a network up to four cabinets.
When performing communication play, use the included communication cable.

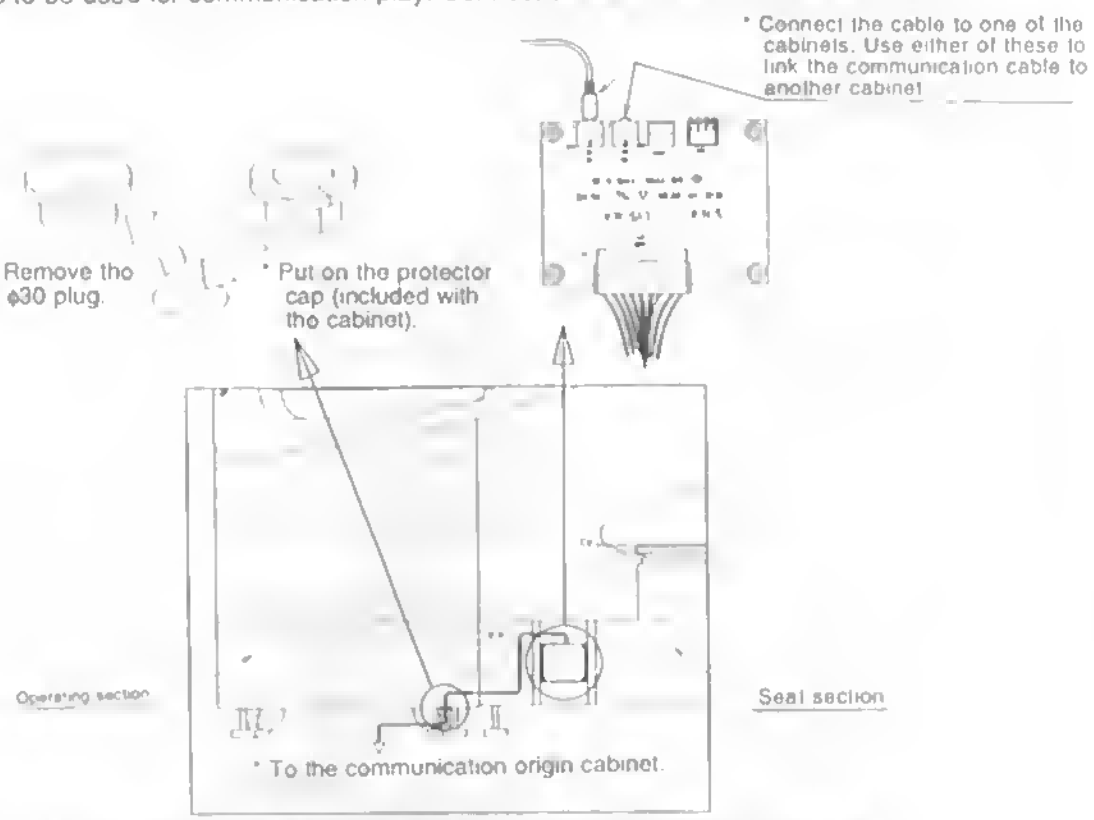
Connecting Communication Cables

(1) Open the seat base lid. (See p. 44.)

(2) Remove the ϕ30 plugs located in the position of the control panel section shown in the diagram and install the included protector.

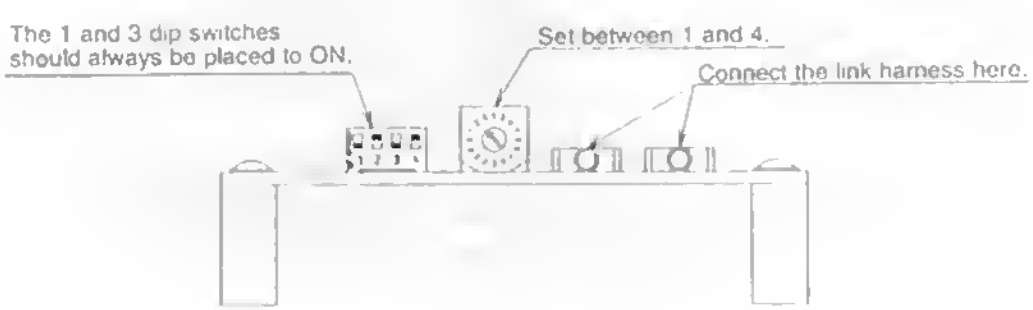
(3) Because there is a communication board in the inside right side of the Hyper NEOGEO 64 PCB unit (located in the diagram), attach the link cable as shown in the diagram.

(4) Pull the communication cable through the lower surface of the control panel section and do the same thing in the other cabinets to be used for communication play. Connect cables to the communication board.

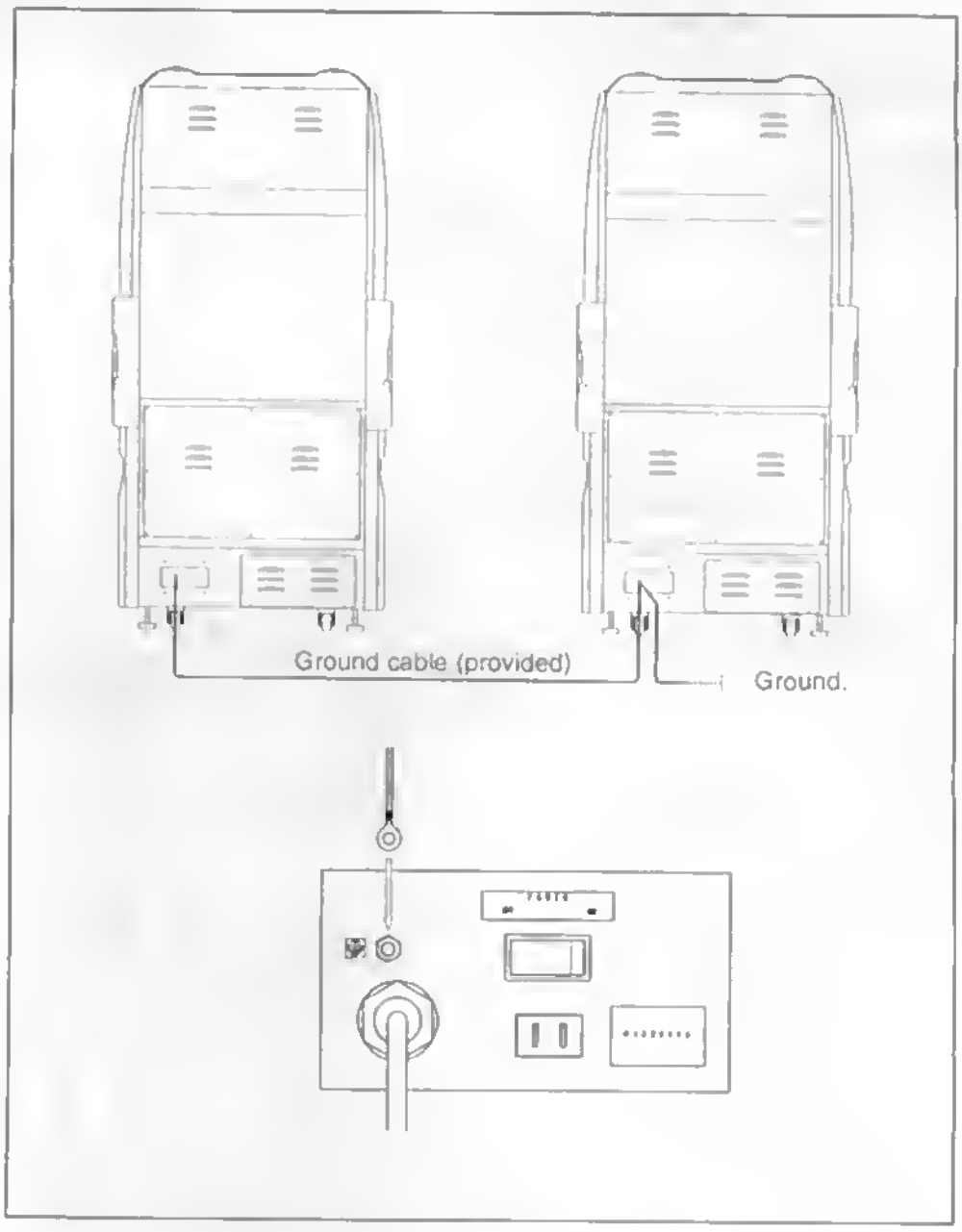


Things to Note When Connecting the Communication Cable

- Always place the communication PCB's dip switches to 1 & 3 to ON and those of 2 & 4 OFF.
- Set the rotary switch of the communication board between 1 and 4.
  Because the ID number of cabinets is set with this switch, be careful that the number is not set to that of another cabinet.
- Because there is no distinction between input and output in connection terminals, connector plugs can be placed in any of these sockets.



(5) Connect the included ground cable to the ground terminal of the rear power section of all cabinets in the communication network as shown in the diagram.
(The diagram shows a two-cabinet communication network. Networks including 3 and 4 cabinets are set up in the same way.)



(6) When cable connections and board settings are finished, close the seat base cover and turn on the cabinet.

(7) While the "Network Check" screen is displayed, turn on the other cabinets. If the communication set-up has been done correctly, the game screen will appear.

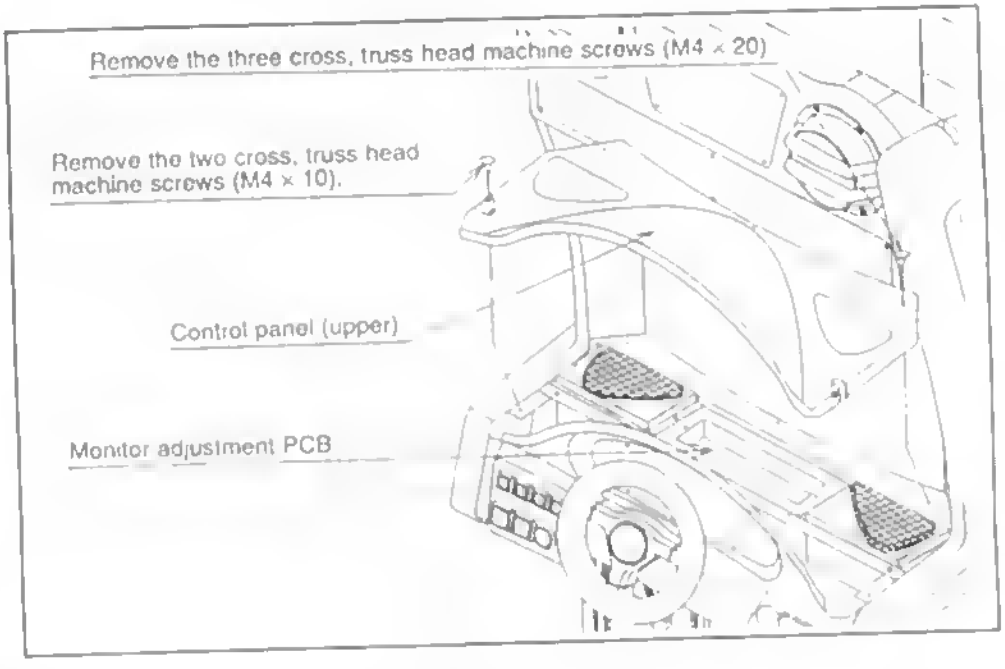
Warning

- **For connecting the link cable, to prevent electric shock and damage to electric circuits, be sure to turn the cabinet off before beginning procedures.**
- **So the link cable is not tripped over, be sure to run it through the back of the cabinet.**

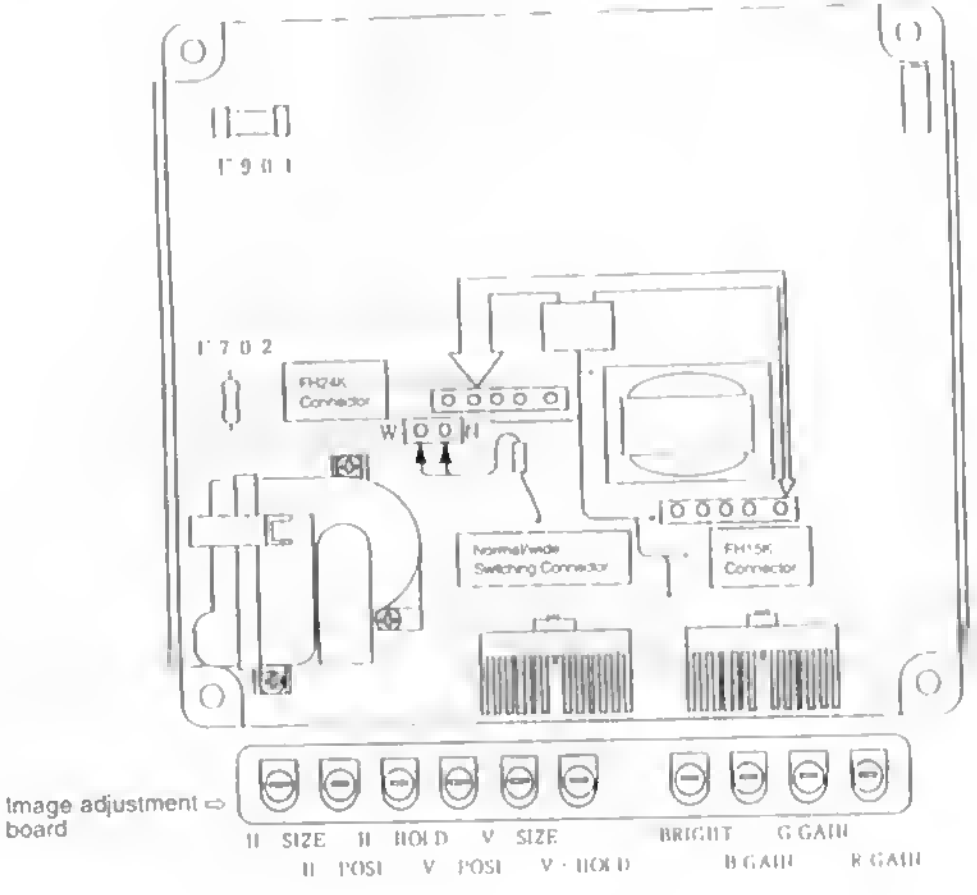
■ Adjusting the Monitor

The monitor in this cabinet is adjusted to optimal performance at the time of shipment from the factory. If for some reason it becomes necessary to make adjustments, make sure it is done by a technician who has experience and knowledge regarding the daily maintenance and supervision of amusement machines. Under no circumstances should areas not designated herein be touched.

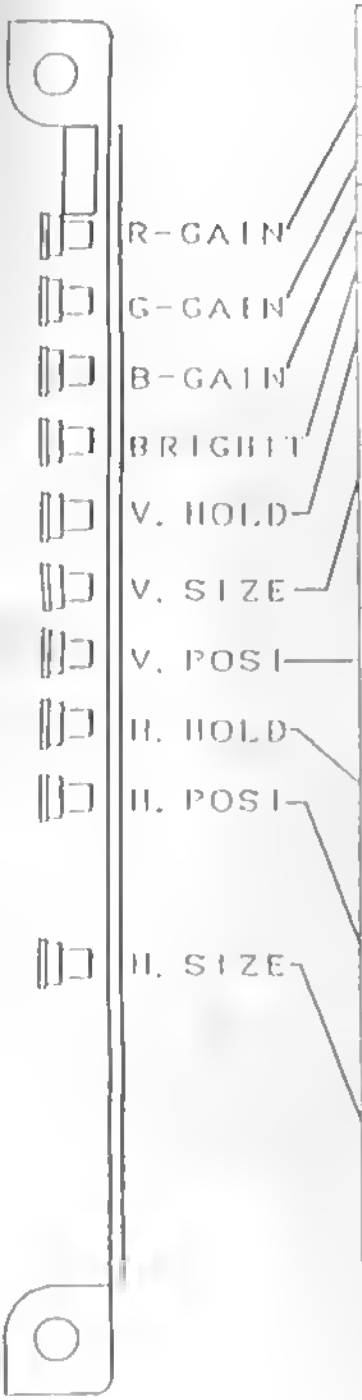
PCB Location

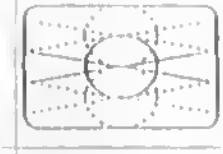
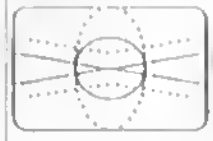
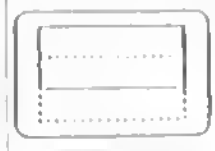
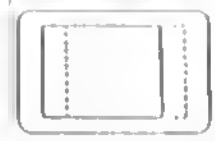
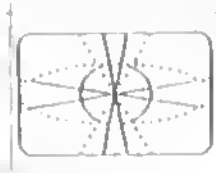


PCB Make-up



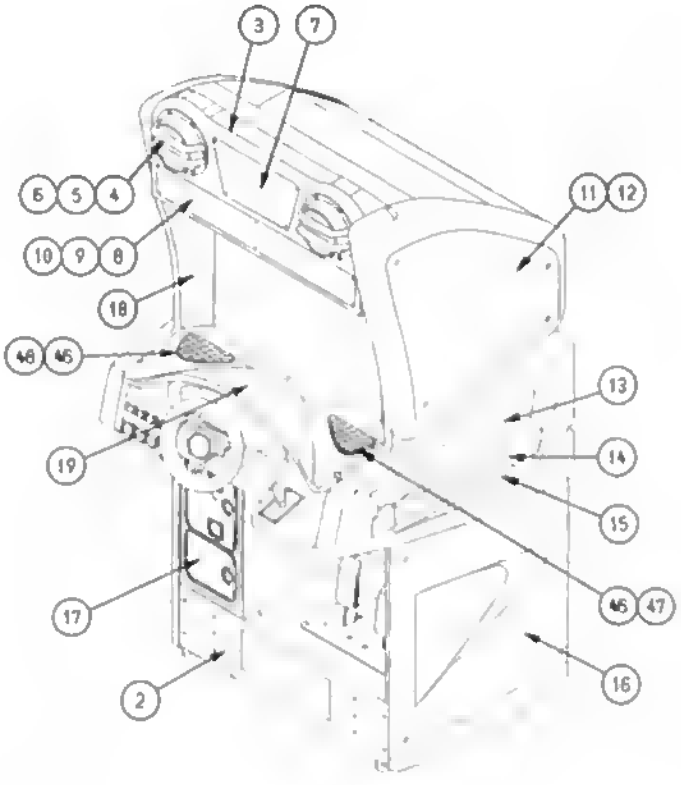
Explanation of Adjustment Functions

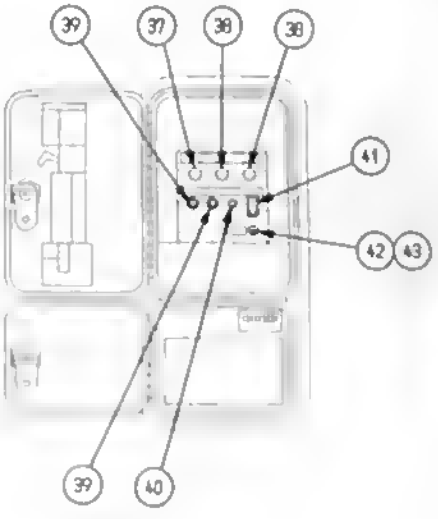


Item No.	Name		Operation	
1	R-GAIN	Red signal amplitude	Adjusts red signal amplitude	
2	G-GAIN	Green signal amplitude	Adjusts green signal amplitude	
3	B-GAIN	Blue signal amplitude	Adjusts blue signat amplitude	
4	BRIGHT	Brightness	Adjusts image brightness	
5	V. HOLD	Vertical hold	Use when the screen runs up and down	
6	V. SIZE	Vertical size	Adjusts vertical image size	
7	V. POSI	Vertical positioning	Adjusts vertical image position	
8	H. HOLD	Horizontal hold	Adjusts image running right to left	
9	H. POSI	Horizontal positioning	Adjusts horizontat image position	
10	H. SIZE	Horizontal size	Adjusts honzontal image size	

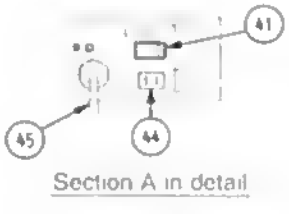
- Inside this cabinet, there are areas that contain a high-voltage of over 25,000 volts (FBT section, etc.). Even when the power has been turned off, because there are instances where these parts still contain an electric charge, under no circumstances should parts other than those designated be touched. There is the danger of severe injury and even death.

■ Parts Lists

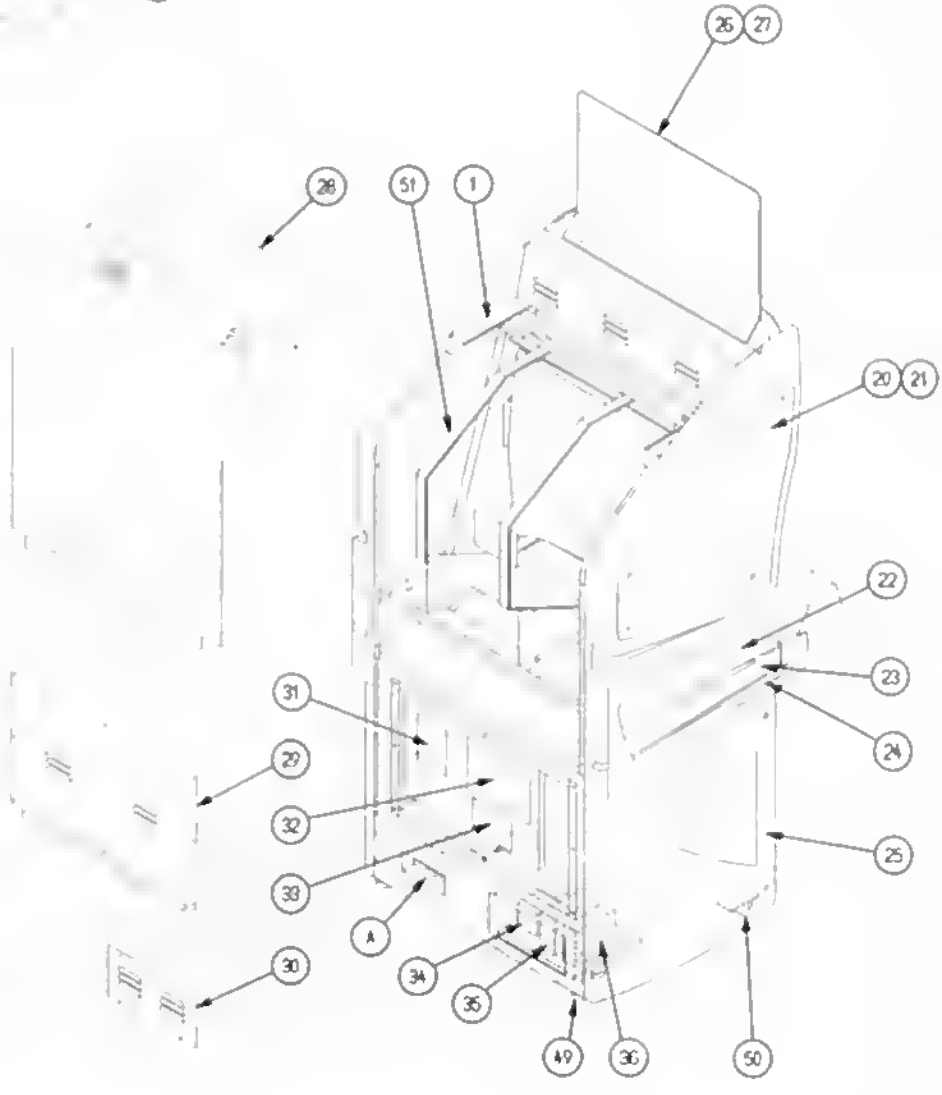




Inside service door

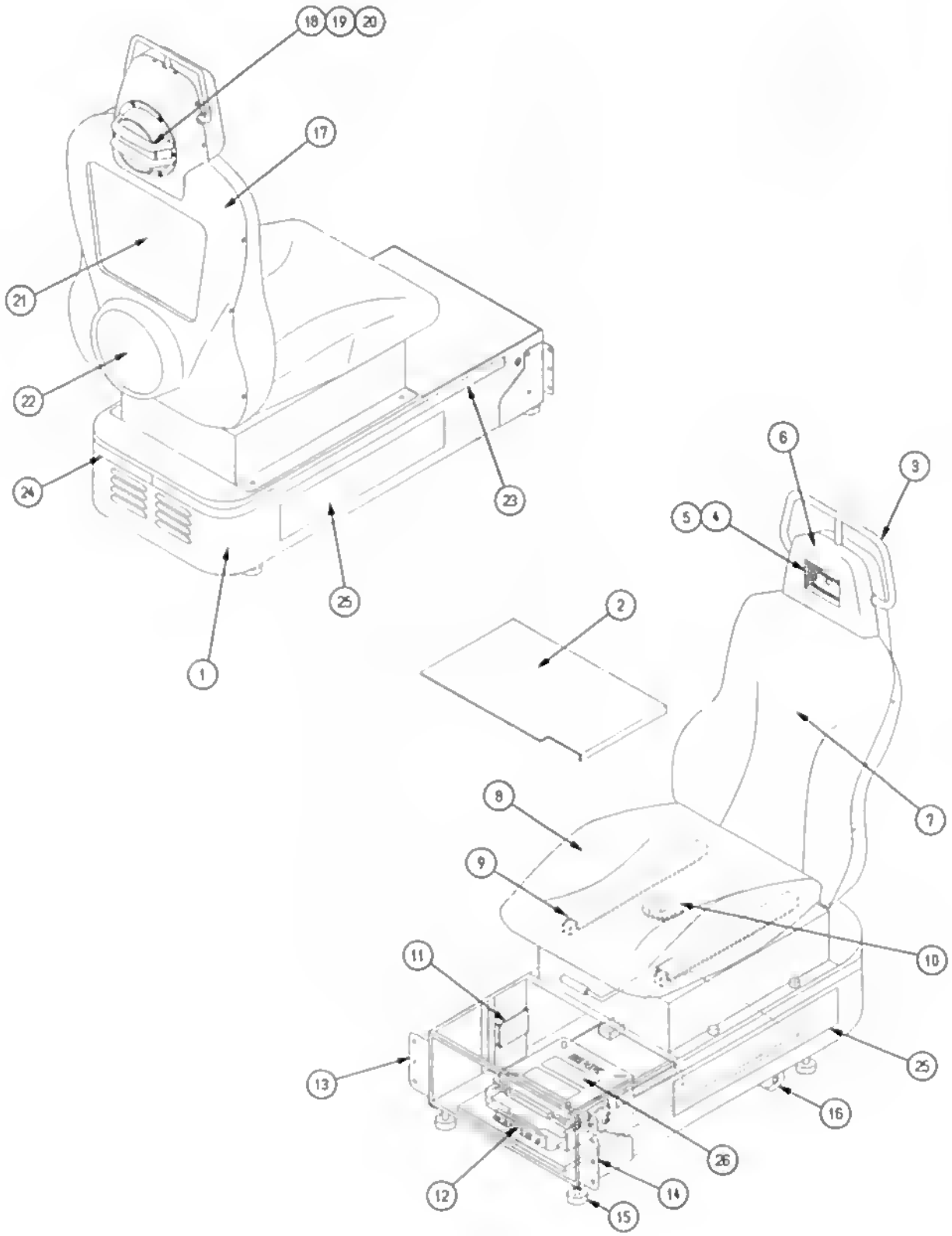


Section A in detail



<Operating section>

No.	Parts name	Part code	Qty.	Remarks
1	Body assembly	510104520	1	
2	Base	512105620	1	
3	Lamp box	518102621	1	
4	Lamp frame assembly	570850621	2	
5	Lamp lense (yellow)	570840621	2	
6	Small lamp (yellow)	30608235	2	
7	Top panel exclusive for RV	570831621	1	
8	How to play panel exclusive for RV	570822621	1	
9	15W fluorescent lamp tube	30115	1	
10	Glow bulb (15W)	30215	1	
11	Side cover R, upper	570011621	1	
12	RV side seal (large), R	71382620	1	
13	RV side grill seal (upper), R	71373620	1	
14	RV side seal (small), R	71371620	1	
15	RV side grill seal (lower), R	71375620	1	
16	Side cover R, lower	570211620	1	
17	Service door	41901	1	Cash box, coin selector and counter included
18	Escutcheon	570044620	1	
19	Control panel, upper	570612620	1	
20	Side cover L, upper	570021621	1	
21	RV side seal (large), L	71380620	1	
22	RV side grill seal (upper), L	71372620	1	
23	RV side seal (small), L	71370620	1	
24	RV side grill seal (lower), L	71374620	1	
25	Side cover L, lower	570221620	1	
26	Billboard	570860621	1	
27	RV pop seal	71390620	1	
28	Rear door	510705620	1	
29	Back panel (Sheet metal)	513003620	1	
30	Power section cover	513500620	1	
31	Lamp drive PCB	LVS-LDA	1	
32	Body sonic active steering board	N64-SAB	1	
33	Lamp control board	LVS-LAC	1	
34	Transformer	32224621	1	
35	Switching regulator, 12V	199302	1	
36	Switching regulator, 5V	199301	1	
37	Volume (dual)	30724102	1	
38	Volume	30724101	2	
39	Service/test switch	3314122	2	
40	Degaussing switch	33113190	1	
41	Power switch	332208	1	
42	Fuse	3036	1	6A anti-surge type
43	Fuse holder	352130	1	
44	AC outlet	3540104	1	
45	AC cord	373011510	1	
46	Speaker	4441206	2	
47	Speaker grill R	510401620	1	
48	Speaker grill L	510301620	1	
49	Adjuster	471734	4	
50	Caster	4625050	4	
51	29 inch monitor	3122903	1	


18
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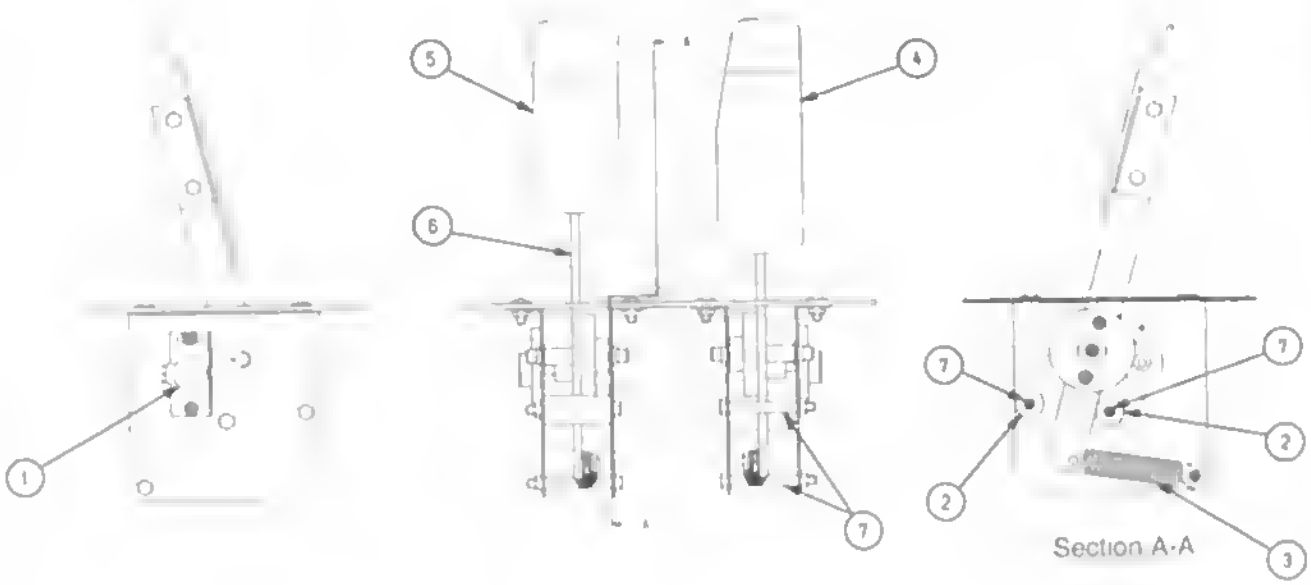
<Seat section>

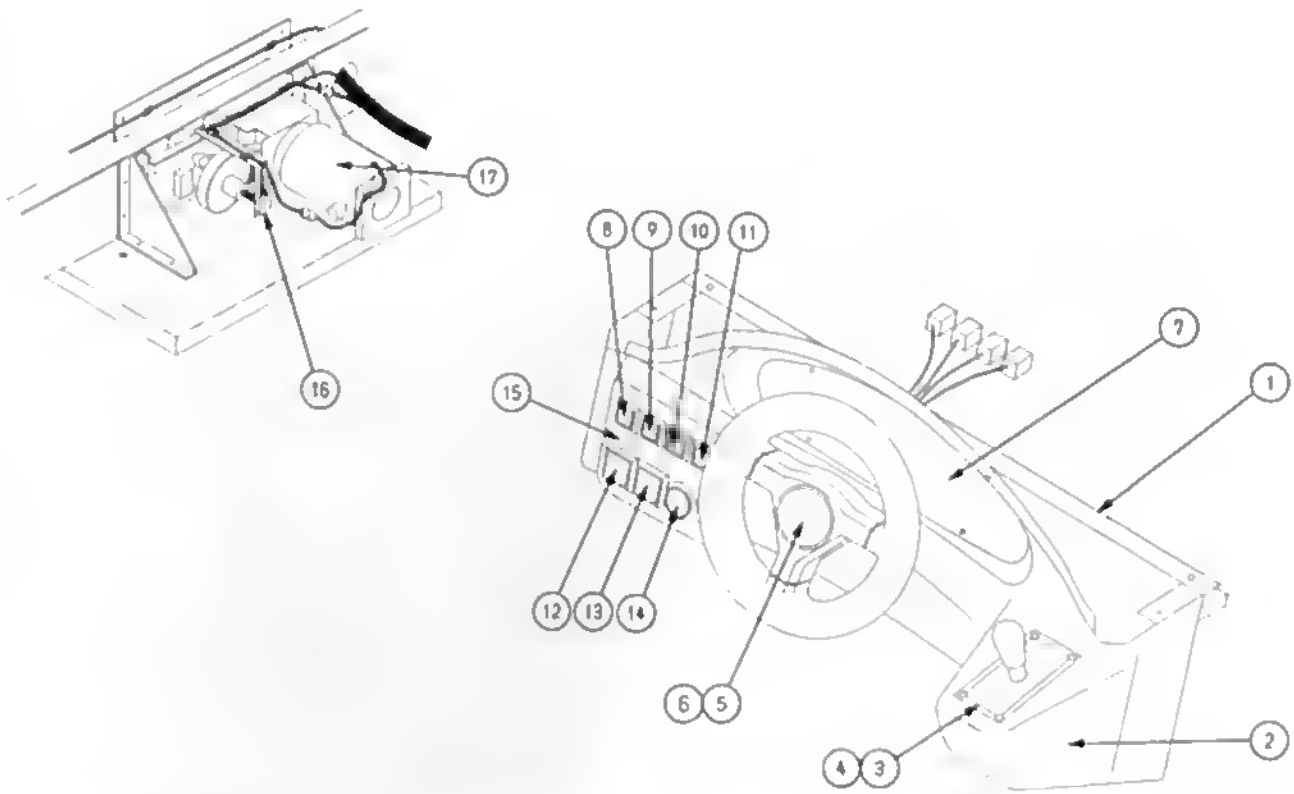
No.	Part name	Part code	Qty.	Remarks
1	Seat base	514104620	1	
2	Seat base cover	514601620	1	
3	Roll bar	525100621	1	
4	Seat speaker brecket	514503620	1	
5	Speaker	4441206	1	
6	Headrest	570441621	1	
7	Upper seat	570421620	1	
8	Lower seat	570411620	1	
9	Seat slide rail	404001620	1	
10	Vibration generator	4442506	1	
11	Communication connector PCB	LVS-ACA	1	
12	HYPER NEOGEO64 substrate unit	LVS-MD	1	
13	Seat mounting metal fitting R	513301620	1	
14	Seat mounting metal fitting L	513201620	1	
15	Adjuster	471734	4	
16	Caster	4625050	2	
17	Seat rear cover	570431621	1	
18	Lamp frame	570850621	1	
19	Lamp lense (red)	570470621	1	
20	Small lamp (red)	30608435	1	
21	Seat rear cover seal	71340620	1	
22	Seat round seal	71342620	1	
23	Seat base line seal R	71377620	1	
24	Seat base line seal L	71376620	1	
25	Seat base seal	71343620	2	
26	64 bit software ROADS EDGE	LVS0010	1	

<Pedal assembly>



No.	Part name	Part code	Qty.	Remarks
1	Volume	3072020	2	
2	Pedal stopper	500102960	3	
3	Helical extension sprint	4812010	2	
4	Accelerator pedal	520231960	1	
5	Brake pedal	520221960	1	
6	Pedal bar	520211960	2	
7	MC spacer	80410650	6	

<Control panel>



No.	Part name	Part code	Qty.	Remarks
1	Control base panel	516104620	1	
2	Control panel, lower	570624620	1	
3	Up/down shifter	405900620	1	
4	Shift panel	570810620	1	
5	Emblem	570640620	1	
6	Emblem base	570641620	1	
7	Metal panel exclusive for RV	570651620	1	
8	Push button switch with illumination lamp 1	33601621	1	
9	Push button switch with illumination lamp 2	33602621	1	
10	Push button switch with illumination lamp 3	33603621	1	
11	Push button switch with illumination lamp 4	33604621	1	
12	Push button switch with illumination lamp A (yellow)	33605621	1	
13	Push button switch with illumination lamp B (yellow)	33606621	1	
14	Push button switch with illumination lamp (red)	33614121	1	
15	Selection button panel exclusive for RV	570662620	1	
16	Steering volume	30724621	1	
17	Active steering wheel kit	405800620	1	

ROADS EDGE WIRING DIAGRAM
POWER SECTION

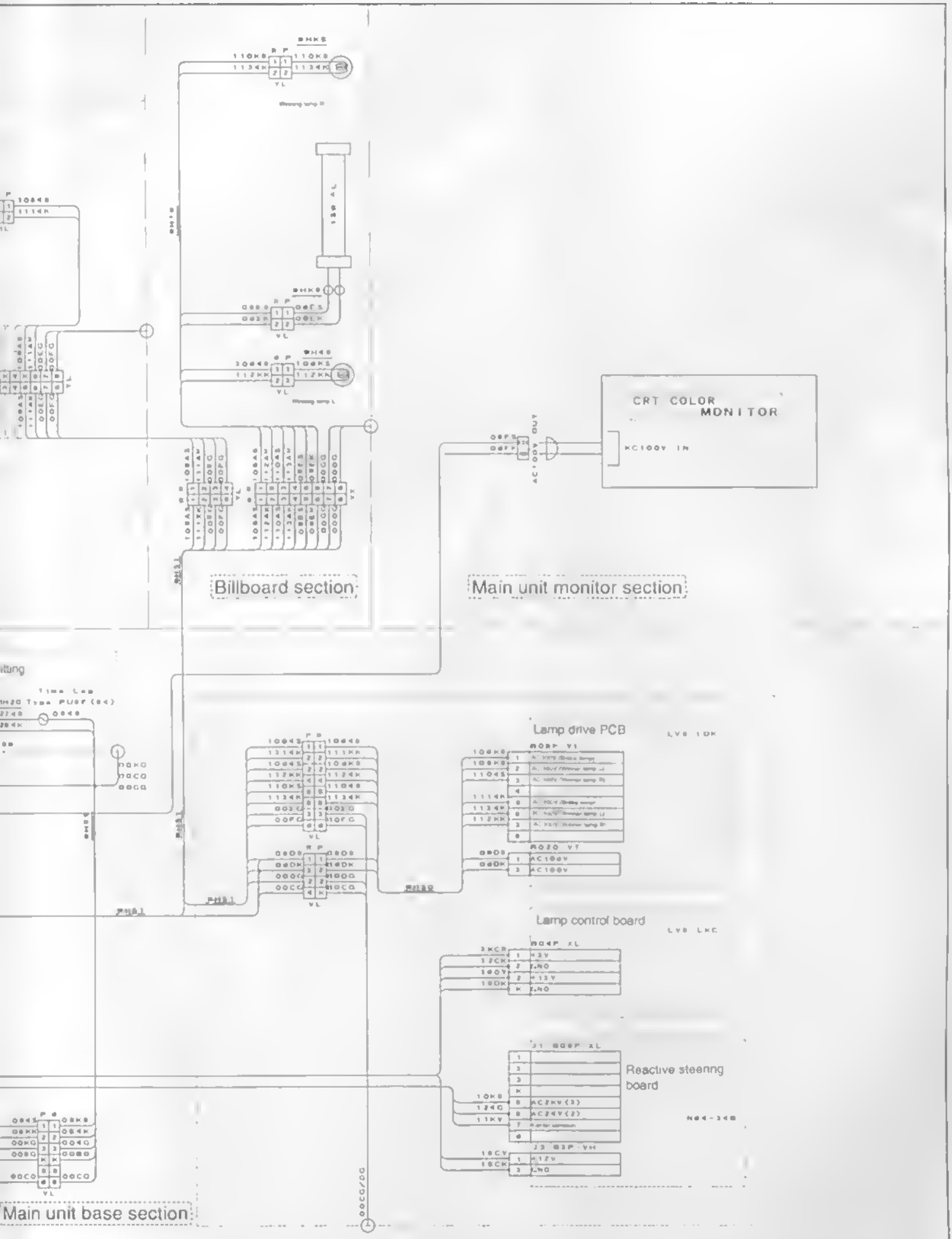
[Note]

1) Places where two-digit numbers are the same are connected to the current.
2) The third-digit symbol represents junction frequencies.
3) Symbols after four digits represent wire colors

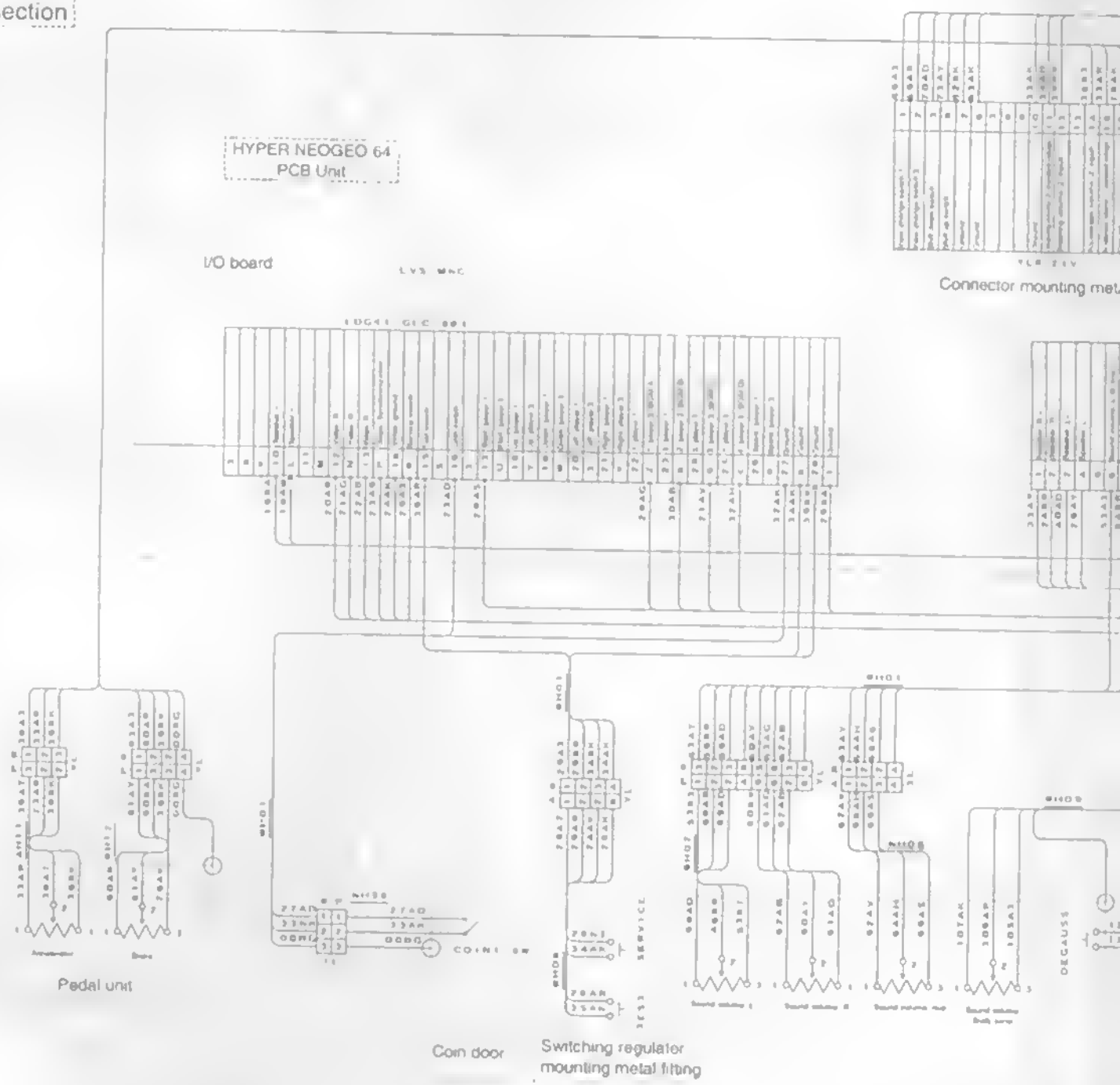
T = Brown	V = Purple
R = Red	H = Grey
O = Orange	S = White
Y = Yellow	K = Black
G = Green	M = Aqua
B = Blue	P = Peach

0 1 A S

4) The location number "00" represents ground cable


CRT COLOR
MONITOR
Billboard section
Main unit monitor section
Lamp drive PCB
Lamp control board
Reactive steering
board
Main unit base section

Seat section



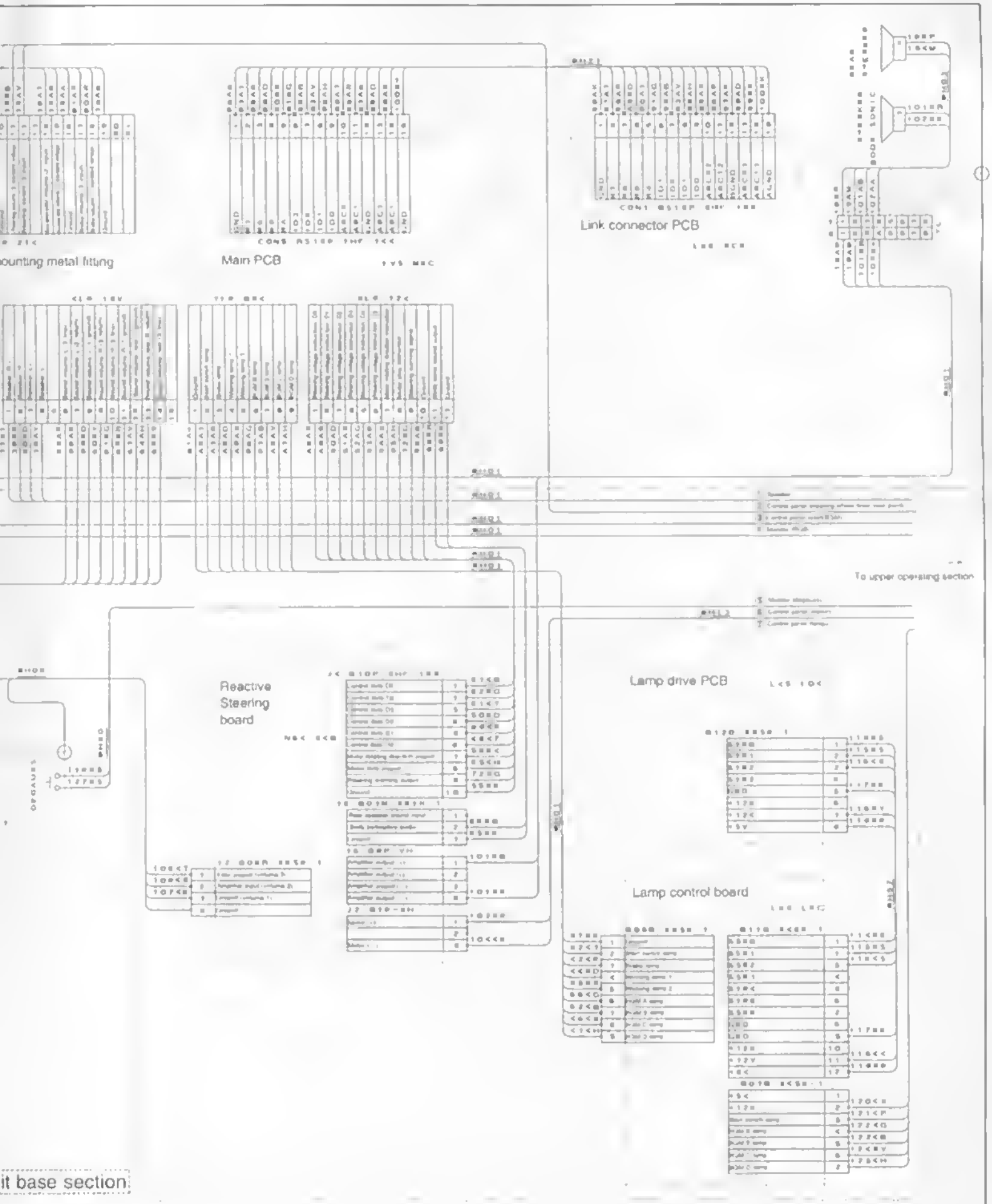
ROADS EDGE WIRING DIAGRAM
SIGNAL. LOWER OPERATING SECTION/SEAT SECTION
[Note]
1) Pieces where two-digit numbers are the seme ere connected to the current
2) The third-digit symbol represents junction frequencies
3) Symbols after four digits rapresent wire colors

T = Brown	V = Purple
R = Red	H = Grey
O = Orange	S = White
Y = Yellow	K = Black
G = Green	M = Aqua
B = Blue	P = Peach

0 1 A S

4) The location number "00" represents ground cable

Main unit base se


ounting metal fitting
Main PCB
Link connector PCB
To upper operating section
Reactive
Steering
board
Lamp drive PCB
Lamp control board
it base section

ROADS EDGE WIRING DIAGRAM
SIGNAL: UPPER OPERATING SECTION/CONTROL PANEL

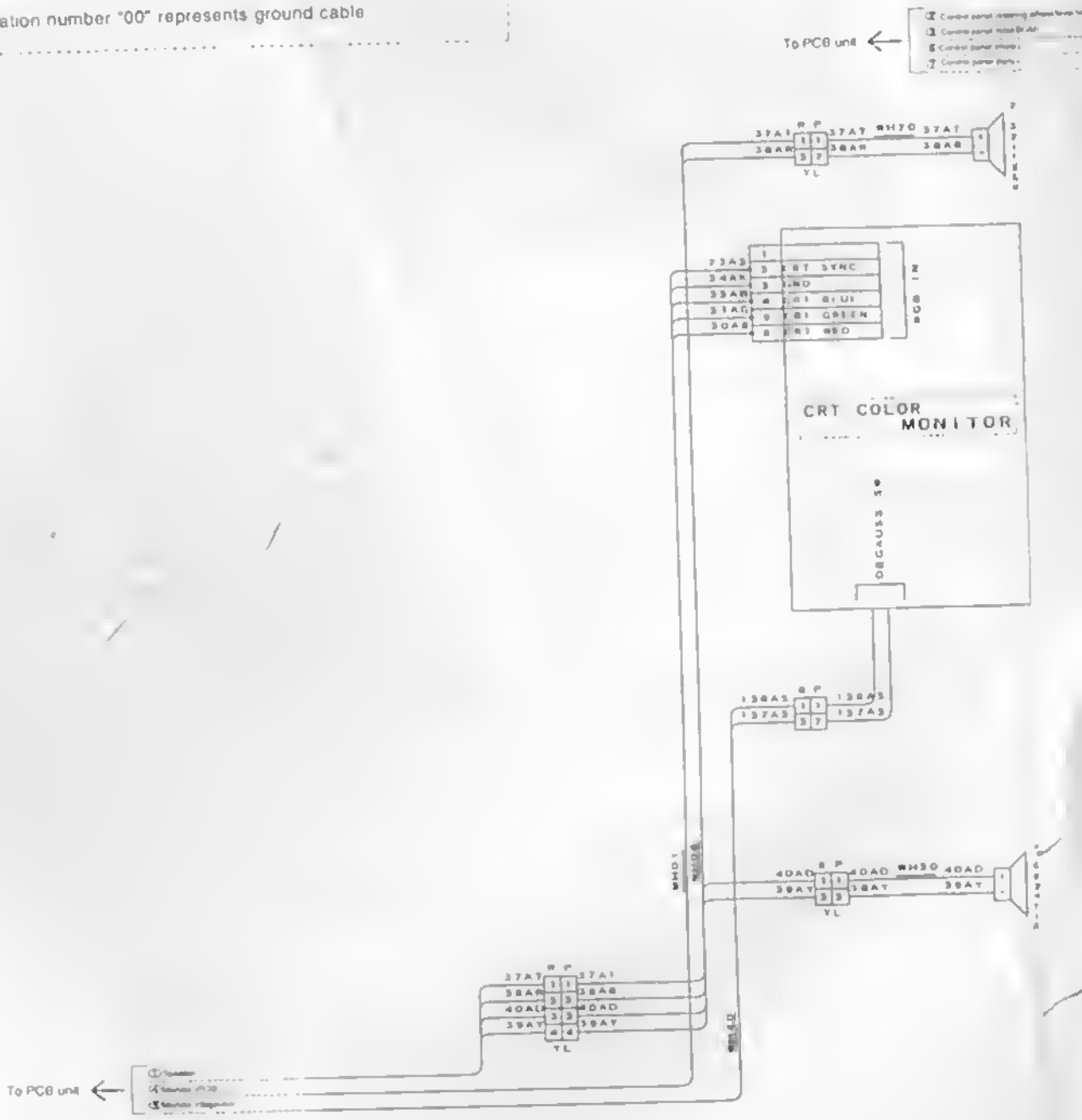
[Note]

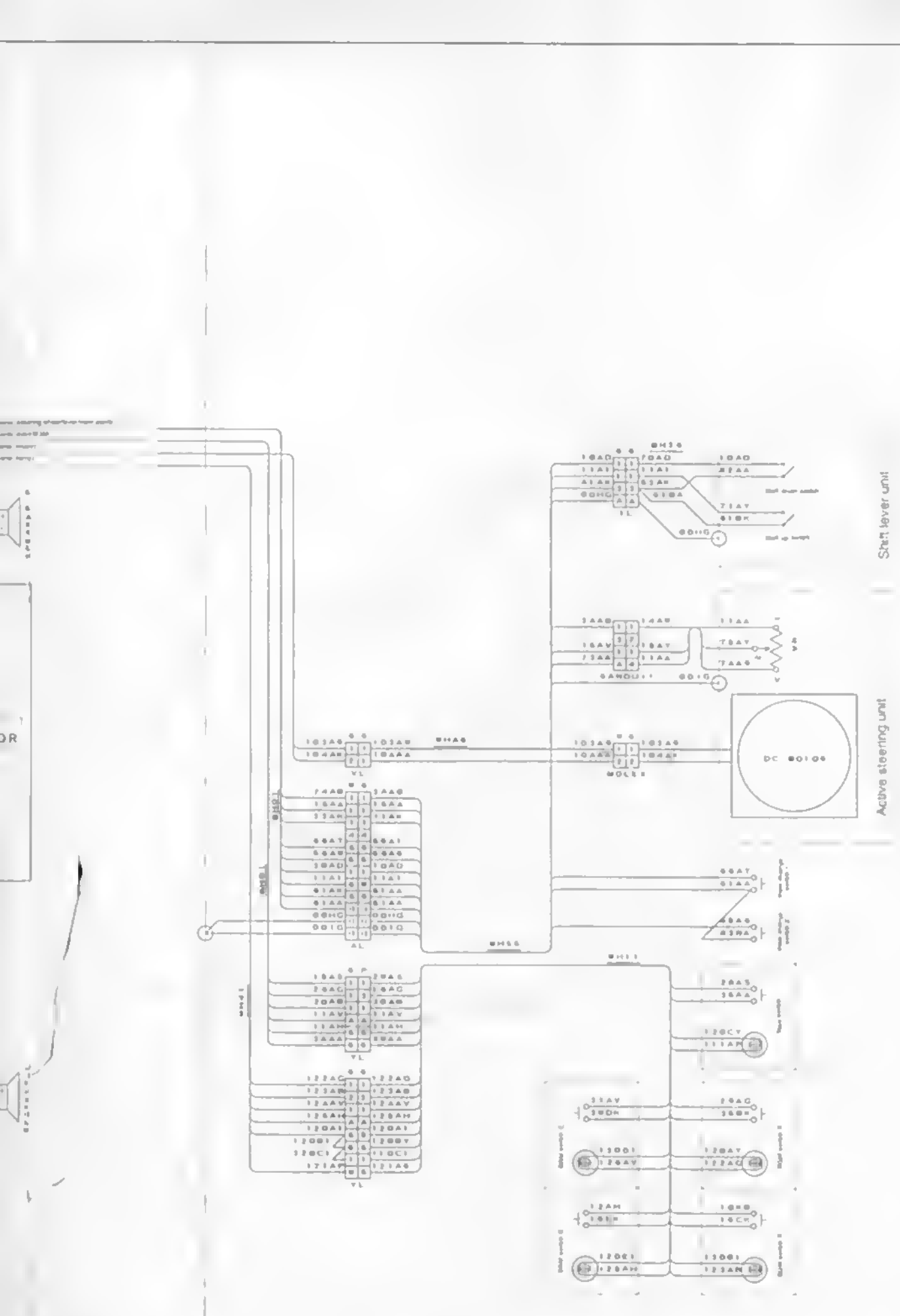
1) Places where two-digit numbers are the same are connected to the current.
2) The third-digit symbol represents junction frequencies.
3) Symbols after four digits represent wire colors

T = Brown	V = Purple
R = Red	H = Grey
D = Orange	S = White
Y = Yellow	K = Black
O = Green	M = Aqua
B = Blue	P = Peach

0 1 A S

4) The location number "00" represents ground cable





tor section

Control panel